

515	520	525
Ser Leu Pro Arg Pro Leu	Ser Pro Thr Lys Leu Thr	Pro Ile Val His
530	535	540
Ser Pro Leu Arg Tyr Gln	Ser Asp Ala Asp Leu Glu	Ala Leu Arg Arg
545	550	555
Lys Leu Ala Asn Ala Pro	Arg Pro Leu Lys Lys Arg	Ser Ser Ile Thr
565	570	575
Glu Pro Glu Gly Pro Gly	Gly Pro Asn Ile Gln Lys	Leu Leu Tyr Gln
580	585	590
Arg Phe Asn Thr Leu Ala	Gly Gly Met Glu Gly Thr	Pro Phe Tyr Gln
595	600	605
Pro Ser Pro Ser Gln Asp	Phe Met Val Thr Leu Ala	Asp Val Asp Asn
610	615	620
Gly Asn Thr Asn Ala Asn	Gly Asn Leu Glu Glu Leu	Pro Pro Ala Gln
625	630	635
Pro Thr Ala Pro Leu Pro	Ala Glu Pro Ala Pro Ser	Ser Asp Ala Asn
645	650	655
Asp Asn Glu Leu Pro Ser	Pro Glu Pro Glu Glu Leu	Ile Cys Pro Gln
660	665	670
Thr Thr His Gln Thr Ala	Glu Pro Ala Glu Asp Asn	Asn Asn Asn Val
675	680	685
Ala Thr Val Pro Thr Thr	Glu Gln Ile Pro Ser Pro	Val Ala Glu Ala
690	695	700
Pro Ser Pro Gly Glu Glu	Gln Val Pro Pro Ala Pro	Leu Pro Pro Ala
705	710	715
Ser His Pro Pro Ala Thr	Ser Thr Asn Lys Arg Thr	Asn Leu Lys Lys
725	730	735
Pro Asn Ser Glu Arg Thr	Gly His Gly Leu Arg Val	Arg Phe Asn Pro
740	745	750
Leu Ala Leu Leu Leu Asp	Ala Ser Leu Glu Gly Glu	Phe Asp Leu Val
755	760	765
Gln Arg Ile Ile Tyr Glu	Val Glu Asp Pro Ser Lys	Pro Asn Asp Glu
770	775	780
Gly Ile Thr Pro Leu His	Asn Ala Val Cys Ala Gly	His His His Ile
785	790	795
Val Lys Phe Leu Leu Asp	Phe Gly Val Asn Val Asn	Ala Ala Asp Ser
805	810	815
Asp Gly Trp Thr Pro Leu	His Cys Ala Ala Ser Cys	Asn Ser Val His
820	825	830
Leu Cys Lys Gln Leu Val	Glu Ser Gly Ala Ala Ile	Phe Ala Ser Thr
835	840	845
Ile Ser Asp Ile Glu Thr	Ala Ala Asp Lys Cys Glu	Glu Glu Met Glu Glu
850	855	860
Gly Tyr Ile Gln Cys Ser	Gln Phe Leu Tyr Gly Val	Gln Glu Lys Leu
865	870	875
Gly Val Met Asn Lys Gly	Val Ala Tyr Ala Leu Trp	Asp Tyr Glu Ala
885	890	895
Gln Asn Ser Asp Glu Leu	Ser Phe His Glu Gly Asp	Ala Leu Thr Ile
900	905	910
Leu Arg Arg Lys Asp Glu		
915	918	

<210> 3436

<211> 868

<212> PRT

<213> Homo sapiens

<400> 3436

Gly Ser Thr His Ala Ser	Glu Lys Met Lys Thr	Gly Arg Ser Ala Leu
1	5	10
Val Val Thr Asp Thr	Gly Asp Met Ser Val	Leu Asn Ser Pro Arg His

			20				25				30				
Gln	Ser	Cys	Ile	Met	His	Val	Asp	Met	Asp	Cys	Phe	Phe	Val	Ser	Val
			35				40				45				
Gly	Ile	Arg	Asn	Arg	Pro	Asp	Leu	Lys	Gly	Lys	Pro	Val	Ala	Val	Thr
			50				55				60				
Ser	Asn	Arg	Gly	Thr	Gly	Arg	Ala	Pro	Leu	Arg	Pro	Gly	Ala	Asn	Pro
			65				70				75				
Gln	Leu	Glu	Trp	Gln	Tyr	Tyr	Gln	Asn	Lys	Ile	Leu	Lys	Gly	Lys	Ala
			85				90				95				
Asp	Ile	Pro	Asp	Ser	Ser	Leu	Trp	Glu	Asn	Pro	Asp	Ser	Ala	Gln	Ala
			100				105				110				
Asn	Gly	Ile	Asp	Ser	Val	Leu	Ser	Arg	Ala	Glu	Ile	Ala	Ser	Cys	Ser
			115				120				125				
Tyr	Glu	Ala	Arg	Gln	Leu	Gly	Ile	Lys	Asn	Gly	Met	Phe	Phe	Gly	His
			130				135				140				
Ala	Lys	Gln	Leu	Cys	Pro	Asn	Leu	Gln	Ala	Val	Pro	Tyr	Asp	Phe	His
			145				150				155				
Ala	Tyr	Lys	Glu	Val	Ala	Gln	Thr	Leu	Tyr	Glu	Thr	Leu	Ala	Ser	Tyr
			165				170				175				
Thr	His	Asn	Ile	Glu	Ala	Val	Ser	Cys	Asp	Glu	Ala	Leu	Val	Asp	Ile
			180				185				190				
Thr	Glu	Ile	Leu	Ala	Glu	Thr	Lys	Leu	Thr	Pro	Asp	Glu	Phe	Ala	Asn
			195				200				205				
Ala	Val	Arg	Met	Glu	Ile	Lys	Asp	Gln	Thr	Lys	Cys	Ala	Ala	Ser	Val
			210				215				220				
Gly	Ile	Gly	Ser	Asn	Ile	Leu	Leu	Ala	Arg	Met	Ala	Thr	Arg	Lys	Ala
			225				230				235				
Lys	Pro	Asp	Gly	Gln	Tyr	His	Leu	Lys	Pro	Glu	Glu	Val	Asp	Asp	Phe
			245				250				255				
Ile	Arg	Gly	Gln	Leu	Val	Thr	Asn	Leu	Pro	Gly	Val	Gly	His	Ser	Met
			260				265				270				
Glu	Ser	Lys	Leu	Ala	Ser	Leu	Gly	Ile	Lys	Thr	Cys	Gly	Asp	Leu	Gln
			275				280				285				
Tyr	Met	Thr	Met	Ala	Lys	Leu	Gln	Lys	Glu	Phe	Gly	Pro	Lys	Thr	Gly
			290				295				300				
Gln	Met	Leu	Tyr	Arg	Phe	Cys	Arg	Gly	Leu	Asp	Asp	Arg	Pro	Val	Arg
			305				310				315				
Thr	Glu	Lys	Glu	Arg	Lys	Ser	Val	Ser	Ala	Glu	Ile	Asn	Tyr	Gly	Ile
			325				330				335				
Arg	Phe	Thr	Gln	Pro	Lys	Glu	Ala	Glu	Ala	Phe	Leu	Leu	Ser	Leu	Ser
			340				345				350				
Glu	Glu	Ile	Gln	Arg	Arg	Leu	Glu	Ala	Thr	Gly	Met	Lys	Gly	Lys	Arg
			355				360				365				
Leu	Thr	Leu	Lys	Ile	Met	Val	Arg	Lys	Pro	Gly	Ala	Pro	Val	Glu	Thr
			370				375				380				
Ala	Lys	Phe	Gly	Gly	His	Gly	Ile	Cys	Asp	Asn	Ile	Ala	Arg	Thr	Val
			385				390				395				
Thr	Leu	Asp	Gln	Ala	Thr	Asp	Asn	Ala	Lys	Ile	Ile	Gly	Lys	Ala	Met
			405				410				415				
Leu	Asn	Met	Phe	His	Thr	Met	Lys	Leu	Asn	Ile	Ser	Asp	Met	Arg	Gly
			420				425				430				
Val	Gly	Ile	His	Val	Asn	Gln	Leu	Val	Pro	Thr	Asn	Leu	Asn	Pro	Ser
			435				440				445				
Thr	Cys	Pro	Ser	Arg	Pro	Ser	Val	Gln	Ser	Ser	His	Phe	Pro	Ser	Gly
			450				455				460				
Ser	Tyr	Ser	Val	Arg	Asp	Val	Phe	Gln	Val	Gln	Lys	Ala	Lys	Lys	Ser
			465				470				475				
Thr	Glu	Glu	Glu	His	Lys	Glu	Val	Phe	Arg	Ala	Ala	Val	Asp	Leu	Glu
			485				490				495				
Ile	Ser	Ser	Ala	Ser	Arg	Thr	Cys	Thr	Phe	Leu	Pro	Pro	Phe	Pro	Ala
			500				505				510				
His	Leu	Pro	Thr	Ser	Pro	Asp	Thr	Asn	Lys	Ala	Glu	Ser	Ser	Gly	Lys
			515				520				525				
Trp	Asn	Gly	Leu	His	Thr	Pro	Val	Ser	Val	Gln	Ser	Arg	Leu	Asn	Leu

530	535	540
Ser Ile Glu Val Pro	Ser Pro Ser Gln Leu Asp	Gln Ser Val Leu Glu
545	550	555
Ala Leu Pro Pro Asp	Leu Arg Glu Gln Val Glu	Gln Val Cys Ala Val
565	570	575
Gln Gln Ala Glu Ser	His Gly Asp Lys Lys Lys	Glu Pro Val Asn Gly
580	585	590
Cys Asn Thr Gly Ile	Leu Pro Gln Pro Val Gly	Thr Val Leu Leu Gln
595	600	605
Ile Pro Glu Pro Gln	Glu Ser Asn Ser Asp Ala	Gly Ile Asn Leu Ile
610	615	620
Ala Leu Pro Ala Phe	Ser Gln Val Asp Pro Glu	Val Phe Ala Ala Leu
625	630	635
Pro Ala Glu Leu Gln	Arg Glu Leu Lys Ala Ala	Tyr Asp Gln Arg Gln
645	650	655
Arg Gln Gly Glu Asn	Ser Thr His Gln Gln Ser	Ala Ser Ala Ser Val
660	665	670
Pro Lys Asn Pro Leu	Leu His Leu Lys Ala Ala	Val Lys Glu Lys Lys
675	680	685
Arg Asn Lys Lys Lys	Lys Thr Ile Gly Ser Pro	Lys Arg Ile Gln Ser
690	695	700
Pro Leu Asn Asn Lys	Leu Leu Asn Ser Pro Ala	Lys Thr Leu Pro Gly
705	710	715
Ala Cys Gly Ser Pro	Gln Lys Leu Ile Asp Gly	Phe Leu Lys His Glu
725	730	735
Gly Pro Pro Ala Glu	Lys Pro Leu Glu Glu Leu	Ser Ala Ser Thr Ser
740	745	750
Gly Val Pro Gly Leu	Ser Ser Leu Gln Ser Asp	Pro Ala Gly Cys Val
755	760	765
Arg Pro Pro Ala Pro	Asn Leu Ala Gly Ala Val	Glu Phe Asn Asp Val
770	775	780
Lys Thr Leu Leu Arg	Glu Trp Ile Thr Thr Ile	Ser Asp Pro Met Glu
785	790	795
Glu Asp Ile Leu Gln	Val Val Lys Tyr Cys Thr	Asp Leu Ile Glu Glu
805	810	815
Lys Asp Leu Glu Lys	Leu Asp Leu Val Ile Lys	Tyr Met Lys Arg Leu
820	825	830
Met Gln Gln Ser Val	Glu Ser Val Trp Asn Met	Ala Phe Asp Phe Ile
835	840	845
Leu Asp Asn Val Gln	Val Val Leu Gln Gln Thr	Tyr Gly Ser Thr Leu
850	855	860
Lys Val Thr		
865	867	

<210> 3437
 <211> 1339
 <212> PRT
 <213> Homo sapiens

<400> 3437

Ser	Leu	Leu	Arg	Leu	Leu	Lys	Ala	Gln	Trp	Gly	Ser	Ser	Gly	Ala	Ala
1				5					10					15	
Ser	Glu	Pro	Val	Val	Leu	Gly	Glu	Glu	Gly	Cys	Gly	Phe	Pro	Ser	Thr
			20					25					30		
Asn	Glu	Tyr	Pro	Asp	Leu	Glu	Glu	Glu	Arg	Ala	Thr	Tyr	Pro	Gln	Glu
		35					40					45			
Glu	Asp	Arg	Phe	Leu	Thr	Pro	Gly	Arg	Ala	Gln	Leu	Leu	Trp	Ser	Pro
	50					55					60				
Trp	Ser	Pro	Leu	Asp	Gln	Glu	Glu	Ala	Cys	Ala	Ser	Arg	Gln	Leu	His
65				70					75					80	
Ser	Leu	Ala	Ser	Phe	Ser	Thr	Val	Thr	Ala	Arg	Arg	Asn	Pro	Leu	His

										85											90											95		
Asn	Pro	Trp	Gly	Met	Glu	Leu	Ala	Ala	Ser	Glu	Asn	Thr	Asp	Ser	Pro																			
			100					105							110																			
Ser	Pro	Arg	Pro	Leu	Arg	Pro	Gly	Val	Thr	Leu	Pro	Pro	Gly	Ala	Leu																			
			115					120							125																			
Thr	Met	Asn	Thr	Lys	Asp	Thr	Thr	Glu	Val	Ala	Glu	Asn	Ser	His	His																			
			130					135						140																				
Leu	Lys	Ile	Phe	Leu	Pro	Lys	Lys	Leu	Leu	Glu	Cys	Leu	Pro	Arg	Cys																			
								150						155	160																			
Pro	Leu	Leu	Pro	Pro	Glu	Arg	Leu	Arg	Trp	Asn	Thr	Asn	Glu	Glu	Ile																			
								165						170	175																			
Ala	Ser	Tyr	Leu	Ile	Thr	Phe	Glu	Lys	His	Asp	Glu	Trp	Leu	Ser	Cys																			
								180						185	190																			
Ala	Pro	Lys	Thr	Arg	Pro	Gln	Asn	Gly	Ser	Ile	Ile	Leu	Tyr	Asn	Arg																			
								195						200	205																			
Lys	Lys	Val	Lys	Tyr	Arg	Lys	Asp	Gly	Tyr	Leu	Trp	Lys	Lys	Arg	Lys																			
								210						215	220																			
Asp	Gly	Lys	Thr	Thr	Arg	Glu	Asp	His	Met	Lys	Leu	Lys	Val	Gln	Gly																			
								225						230	235																			
Met	Glu	Cys	Leu	Tyr	Gly	Cys	Tyr	Val	His	Ser	Ser	Ile	Val	Pro	Thr																			
								245						250	255																			
Phe	His	Arg	Arg	Cys	Tyr	Trp	Leu	Leu	Gln	Asn	Pro	Asp	Ile	Val	Leu																			
								260						265	270																			
Val	His	Tyr	Leu	Asn	Val	Pro	Ala	Leu	Glu	Asp	Cys	Gly	Lys	Gly	Cys																			
								275						280	285																			
Ser	Pro	Ile	Phe	Cys	Ser	Ile	Ser	Ser	Asp	Arg	Arg	Glu	Trp	Leu	Lys																			
								290						295	300																			
Trp	Ser	Arg	Glu	Glu	Leu	Leu	Gly	Gln	Leu	Lys	Pro	Met	Phe	His	Gly																			
								305						310	315																			
Ile	Lys	Trp	Ser	Cys	Gly	Asn	Gly	Thr	Glu	Glu	Phe	Ser	Val	Glu	His																			
								325						330	335																			
Leu	Val	Gln	Gln	Ile	Leu	Asp	Thr	His	Pro	Thr	Lys	Pro	Ala	Pro	Arg																			
								340						345	350																			
Thr	His	Ala	Cys	Leu	Cys	Ser	Gly	Gly	Leu	Gly	Ser	Gly	Ser	Leu	Thr																			
								355						360	365																			
His	Lys	Cys	Ser	Ser	Thr	Lys	His	Arg	Ile	Ile	Ser	Pro	Lys	Val	Glu																			
								370						375	380																			
Pro	Arg	Ala	Leu	Thr	Leu	Thr	Ser	Ile	Pro	His	Pro	His	Pro	Pro	Glu																			
								385						390	400																			
Pro	Pro	Pro	Leu	Ile	Ala	Pro	Leu	Pro	Pro	Glu	Leu	Pro	Lys	Ala	His																			
								405						410	415																			
Thr	Ser	Pro	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Gly	Phe	Ala	Glu																			
								420						425	430																			
Pro	Leu	Glu	Ile	Arg	Pro	Ser	Pro	Pro	Thr	Ser	Arg	Gly	Gly	Ser	Ser																			
								435						440	445																			
Arg	Gly	Gly	Thr	Ala	Ile	Leu	Leu	Leu	Thr	Gly	Leu	Glu	Gln	Arg	Ala																			
								450						455	460																			
Gly	Gly	Leu	Thr	Pro	Thr	Arg	His	Leu	Ala	Pro	Gln	Ala	Asp	Pro	Arg																			
								465						470	475																			
Pro	Ser	Met	Ser	Leu	Ala	Val	Val	Val	Gly	Thr	Glu	Pro	Ser	Ala	Pro																			
								485						490	495																			
Pro	Ala	Pro	Pro	Ser	Pro	Ala	Phe	Asp	Pro	Asp	Arg	Phe	Leu	Asn	Ser																			
								500						505	510																			
Pro	Gln	Arg	Gly	Gln	Thr	Tyr	Gly	Gly	Gly	Gln	Gly	Val	Ser	Pro	Asp																			
								515						520	525																			
Phe	Pro	Glu	Ala	Glu	Ala	Ala	His	Thr	Pro	Cys	Ser	Ala	Leu	Glu	Pro																			
								530						535	540																			
Ala	Ala	Ala	Leu	Glu	Pro	Gln	Ala	Ala	Ala	Arg	Gly	Pro	Pro	Pro	Gln																			
								545						550	555																			
Ser	Val	Ala	Gly	Gly	Arg	Arg	Gly	Asn	Cys	Phe	Phe	Ile	Gln	Asp	Asp																			
								565						570	575																			
Asp	Ser	Gly	Glu	Leu	Lys	Gly	His	Gly	Ala	Ala	Pro	Pro	Ile	Pro																				
								580						585	590																			
Ser	Pro	Pro	Pro	Ser	Pro	Pro	Pro	Ser	Pro	Ala	Pro	Leu	Glu	Pro	Ser																			

595 600 605
 Ser Arg Val Gly Arg Gly Glu Ala Leu Phe Gly Gly Pro Val Gly Ala
 610 615 620
 Ser Glu Leu Glu Pro Phe Ser Leu Ser Ser Phe Pro Asp Leu Met Gly
 625 630 635 640
 Glu Leu Ile Ser Asp Glu Ala Pro Ser Ile Pro Ala Pro Thr Pro Gln
 645 650 655
 Leu Ser Pro Ala Leu Ser Thr Ile Thr Asp Phe Ser Pro Glu Trp Ser
 660 665 670
 Tyr Pro Glu Gly Gly Val Lys Val Leu Ile Thr Gly Pro Trp Thr Glu
 675 680 685
 Ala Ala Glu His Tyr Ser Cys Val Phe Asp His Ile Ala Val Pro Ala
 690 695 700
 Ser Leu Val Gln Pro Gly Val Leu Arg Cys Tyr Cys Pro Ala His Glu
 705 710 715 720
 Val Gly Leu Val Ser Leu Gln Val Ala Gly Arg Glu Gly Pro Leu Ser
 725 730 735
 Ala Ser Val Leu Phe Glu Tyr Arg Ala Arg Arg Phe Leu Ser Leu Pro
 740 745 750
 Ser Thr Gln Leu Asp Trp Leu Ser Leu Asp Asp Asn Gln Phe Arg Met
 755 760 765
 Ser Ile Leu Glu Arg Leu Glu Gln Met Glu Lys Arg Met Ala Glu Ile
 770 775 780
 Ala Ala Ala Gly Gln Val Pro Cys Gln Gly Pro Asp Ala Pro Pro Val
 785 790 795 800
 Gln Asp Glu Gly Gln Gly Pro Gly Phe Glu Ala Arg Val Val Val Leu
 805 810 815
 Val Glu Ser Met Ile Pro Arg Ser Thr Trp Lys Gly Pro Glu Arg Leu
 820 825 830
 Ala His Gly Ser Pro Phe Arg Gly Met Ser Leu Leu His Leu Ala Ala
 835 840 845
 Ala Gln Gly Tyr Ala Arg Leu Ile Glu Thr Leu Ser Gln Trp Arg Ser
 850 855 860
 Val Glu Thr Gly Ser Leu Asp Leu Glu Gln Glu Val Asp Pro Leu Asn
 865 870 875 880
 Val Asp His Phe Ser Cys Thr Pro Leu Met Trp Ala Cys Ala Leu Gly
 885 890 895
 His Leu Glu Ala Ala Val Leu Leu Phe Arg Trp Asn Arg Gln Ala Leu
 900 905 910
 Ser Ile Pro Asp Ser Leu Gly Arg Leu Pro Leu Ser Val Ala His Ser
 915 920 925
 Arg Gly His Val Arg Leu Ala Arg Cys Leu Glu Glu Leu Gln Arg Gln
 930 935 940
 Glu Pro Ser Val Glu Pro Pro Phe Ala Leu Ser Pro Pro Ser Ser Ser
 945 950 955 960
 Pro Asp Thr Gly Leu Ser Ser Val Ser Ser Pro Ser Glu Leu Ser Asp
 965 970 975
 Gly Thr Phe Ser Val Thr Ser Ala Tyr Ser Ser Ala Pro Asp Gly Ser
 980 985 990
 Pro Pro Pro Ala Pro Leu Pro Ala Ser Glu Met Thr Met Glu Asp Met
 995 1000 1005
 Ala Pro Gly Gln Leu Ser Ser Gly Val Pro Glu Ala Pro Leu Leu Leu
 1010 1015 1020
 Met Asp Tyr Glu Ala Thr Asn Ser Lys Gly Pro Leu Ser Ser Leu Pro
 1025 1030 1035 1040
 Ala Leu Pro Pro Ala Ser Asp Asp Gly Ala Ala Pro Glu Asp Ala Asp
 1045 1050 1055
 Ser Pro Gln Ala Val Asp Val Ile Pro Val Asp Met Ile Ser Leu Ala
 1060 1065 1070
 Lys Gln Ile Glu Ala Thr Pro Glu Arg Ile Lys Arg Glu Asp Phe
 1075 1080 1085
 Val Gly Leu Pro Glu Ala Gly Ala Ser Met Arg Glu Arg Thr Gly Ala
 1090 1095 1100
 Val Gly Leu Ser Glu Thr Met Ser Trp Leu Ala Ser Tyr Leu Glu Asn

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1105          1110          1115          1120
Val Asp His Phe Pro Ser Ser Thr Pro Pro Ser Glu Leu Pro Phe Glu
          1125          1130          1135
Arg Gly Arg Leu Gly Leu Ser Leu Thr Ala Pro Ser Trp Ala Glu Phe
          1140          1145          1150
Leu Ser Cys Ile Pro Pro Val Gly Lys Ile Gly Lys Leu Ile Phe Ala
          1155          1160          1165
Leu Leu Thr Leu Ser Asp Gln Glu Gln Arg Glu Leu Tyr Glu Ala Ala
          1170          1175          1180
Arg Val Ile Gln Thr Ala Phe Arg Lys Tyr Lys Gly Arg Arg Leu Lys
1185          1190          1195          1200
Glu Gln Gln Glu Val Ala Ala Val Ile Gln Arg Cys Tyr Arg Lys
          1205          1210          1215
Tyr Lys Gln Leu Thr Trp Ile Ala Leu Lys Phe Ala Leu Tyr Lys Lys
          1220          1225          1230
Met Thr Gln Ala Ala Ile Leu Ile Gln Ser Lys Phe Arg Ser Tyr Tyr
          1235          1240          1245
Glu Gln Lys Arg Phe Gln Gln Ser Arg Arg Ala Ala Val Leu Ile Gln
          1250          1255          1260
Gln His Tyr Arg Ser Tyr Arg Arg Arg Pro Gly Pro Pro His Arg Thr
1265          1270          1275          1280
Ser Ala Thr Leu Pro Ala Arg Asn Lys Gly Ser Phe Leu Thr Lys Lys
          1285          1290          1295
Gln Asp Gln Ala Ala Arg Lys Ile Met Arg Phe Leu Arg Arg Cys Arg
          1300          1305          1310
His Arg Met Arg Glu Leu Lys Gln Asn Gln Glu Leu Glu Gly Leu Pro
          1315          1320          1325
Gln Pro Gly Leu Ala Thr
          1330          1334

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<210> 3438
<211> 711
<212> PRT
<213> Homo sapiens

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<400> 3438
Phe Gly Arg Leu Leu Trp Gly Thr Ala Phe Lys Ser Trp Lys Met Lys
 1          5          10          15
Ala Pro Ile Pro His Leu Ile Leu Leu Tyr Ala Thr Phe Thr Gln Ser
          20          25          30
Leu Lys Val Val Thr Lys Arg Gly Ser Ala Asp Gly Cys Thr Asp Trp
          35          40          45
Ser Ile Asp Ile Lys Lys Tyr Gln Val Leu Val Gly Glu Pro Val Arg
          50          55          60
Ile Lys Cys Ala Leu Phe Tyr Gly Tyr Ile Arg Thr Asn Tyr Ser Leu
          65          70          75          80
Ala Gln Ser Ala Gly Leu Ser Leu Met Trp Tyr Lys Ser Ser Gly Pro
          85          90          95
Gly Asp Phe Glu Glu Pro Ile Ala Phe Asp Gly Ser Arg Met Ser Lys
          100          105          110
Glu Glu Asp Ser Ile Trp Phe Arg Pro Thr Leu Leu Gln Asp Ser Gly
          115          120          125
Leu Tyr Ala Cys Val Ile Arg Asn Ser Thr Tyr Cys Met Lys Val Ser
          130          135          140
Ile Ser Leu Thr Val Gly Glu Asn Asp Thr Gly Leu Cys Tyr Asn Ser
          145          150          155          160
Lys Met Lys Tyr Phe Glu Lys Ala Glu Leu Ser Lys Ser Lys Glu Ile
          165          170          175
Ser Cys Arg Asp Ile Glu Asp Phe Leu Leu Pro Thr Arg Glu Pro Glu
          180          185          190
Ile Leu Trp Tyr Lys Glu Cys Arg Thr Lys Thr Trp Arg Pro Ser Ile

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195	200	205
Val Phe Lys Arg Asp Thr Leu	Leu Ile Arg Glu	Val Arg Glu Asp Asp
210	215	220
Ile Gly Asn Tyr Thr Cys Glu	Leu Lys Tyr Gly	Phe Val Val Arg
225	230	235
Arg Thr Thr Glu Leu Thr Val	Thr Ala Pro Leu Thr	Asp Lys Pro Pro
245	250	255
Lys Leu Leu Tyr Pro Met Glu	Ser Lys Leu Thr Ile	Gln Glu Thr Gln
260	265	270
Leu Gly Asp Ser Ala Asn Leu	Thr Cys Arg Ala Phe	Phe Gly Tyr Ser
275	280	285
Gly Asp Val Ser Pro Leu Ile	Tyr Trp Met Lys Gly	Glu Lys Phe Ile
290	295	300
Glu Asp Leu Asp Glu Asn Arg	Val Trp Glu Ser Asp	Ile Lys Ile Leu
305	310	315
Lys Glu His Leu Gly Glu Gln	Glu Val Ser Ile Ser	Leu Ile Val Asp
325	330	335
Ser Val Glu Glu Gly Asp Leu	Gly Asn Tyr Ser Cys	Tyr Val Glu Asn
340	345	350
Gly Asn Gly Arg Arg His Ala	Ser Val Leu Leu His	Lys Arg Glu Leu
355	360	365
Met Tyr Thr Val Glu Leu Ala	Gly Gly Leu Gly Ala	Ile Leu Leu Leu
370	375	380
Leu Val Cys Leu Val Thr Ile	Tyr Lys Cys Tyr Lys	Ile Glu Ile Met
385	390	395
Leu Phe Tyr Arg Asn His Phe	Gly Ala Glu Leu Asp	Gly Asp Asn
405	410	415
Lys Asp Tyr Asp Ala Tyr Leu	Ser Tyr Thr Lys Val	Asp Pro Asp Gln
420	425	430
Trp Asn Gln Glu Thr Gly Glu	Glu Glu Arg Phe Ala	Leu Glu Ile Leu
435	440	445
Pro Asp Met Leu Glu Lys His	Tyr Gly Tyr Lys Leu	Phe Ile Pro Asp
450	455	460
Arg Asp Leu Ile Pro Thr Gly	Thr Tyr Ile Glu Asp	Val Ala Arg Cys
465	470	475
Val Asp Gln Ser Lys Arg Leu	Ile Ile Val Met Thr	Pro Asn Tyr Val
485	490	495
Val Arg Arg Gly Trp Ser Ile	Phe Glu Leu Glu Thr	Arg Leu Arg Asn
500	505	510
Met Leu Val Thr Gly Glu Ile	Lys Val Ile Leu Ile	Glu Cys Ser Glu
515	520	525
Leu Arg Gly Ile Met Asn Tyr	Gln Glu Val Glu Ala	Leu Lys His Thr
530	535	540
Ile Lys Leu Leu Thr Val Ile	Lys Trp His Gly Pro	Lys Cys Asn Lys
545	550	555
Leu Asn Ser Lys Phe Trp Lys	Arg Leu Gln Tyr Glu	Met Pro Phe Lys
565	570	575
Arg Ile Glu Pro Ile Thr His	Glu Gln Ala Leu Asp	Val Ser Glu Gln
580	585	590
Gly Pro Phe Gly Glu Leu Gln	Thr Val Ser Ala Ile	Ser Met Ala Ala
595	600	605
Ala Thr Ser Thr Ala Leu Ala	Thr Ala His Pro Asp	Leu Arg Ser Thr
610	615	620
Phe His Asn Thr Tyr His Ser	Gln Met Arg Gln Lys	His Tyr Tyr Arg
625	630	635
Ser Tyr Glu Tyr Asp Val Pro	Pro Thr Gly Thr Leu	Pro Leu Thr Ser
645	650	655
Ile Gly Asn Gln His Thr Tyr	Cys Asn Ile Pro Met	Thr Leu Ile Asn
660	665	670
Gly Gln Arg Pro Gln Thr Lys	Ser Ser Arg Glu Gln	Asn Pro Asp Glu
675	680	685
Ala His Thr Asn Ser Ala Ile	Leu Pro Leu Leu Pro	Arg Glu Thr Ser
690	695	700
Ile Ser Ser Val Ile Trp		

705

710

<210> 3439
 <211> 597
 <212> PRT
 <213> Homo sapiens

<400> 3439
 Gly Pro Gly Asn Ser Ser Ile Leu Ile Gly Gly Gly His Leu Phe Leu
 1 5 10 15
 Ile Arg Ser Cys Leu Asn Leu Leu Leu Leu Asn Ser Lys Glu Asn Thr
 20 25 30
 Glu His Thr Met Ala Lys Lys Val Ala Val Ile Gly Ala Gly Val Ser
 35 40 45
 Gly Leu Ser Ser Ile Lys Cys Cys Val Asp Glu Asp Leu Glu Pro Thr
 50 55 60
 Cys Phe Glu Arg Ser Asp Asp Ile Gly Gly Leu Trp Lys Phe Thr Glu
 65 70 75 80
 Arg Gly Ser Ser Leu Ser Val Met Ile Trp Pro Leu Ala Leu Ser Leu
 85 90 95
 Leu Arg His Gly Gly Phe Cys Tyr Ser Asp Phe Pro Phe His Glu Asp
 100 105 110
 Tyr Pro Asn Phe Met Asn His Glu Lys Phe Trp Asp Tyr Leu Gln Glu
 115 120 125
 Phe Ala Glu His Phe Asp Leu Leu Lys Tyr Ile Gln Phe Lys Thr Thr
 130 135 140
 Val Cys Gly Ile Thr Lys Arg Pro Asp Phe Ser Glu Thr Gly Gln Trp
 145 150 155 160
 Asp Val Val Thr Glu Thr Glu Gly Lys Gln Asn Arg Ala Val Phe Asp
 165 170 175
 Ala Val Met Val Cys Thr Gly His Phe Leu Asn Pro His Leu Pro Leu
 180 185 190
 Glu Ala Phe Pro Gly Ile His Lys Phe Lys Gly Gln Ile Leu His Ser
 195 200 205
 Gln Glu Tyr Lys Ile Pro Glu Gly Phe Gln Gly Lys Arg Val Leu Val
 210 215 220
 Ile Gly Leu Gly Asn Thr Gly Gly Asp Ile Ala Val Glu Leu Ser Arg
 225 230 235 240
 Thr Ala Ala Gln Val Leu Leu Ser Thr Arg Thr Gly Thr Trp Val Leu
 245 250 255
 Gly Arg Ser Ser Asp Trp Gly Tyr Pro Tyr Asn Met Met Val Thr Arg
 260 265 270
 Arg Cys Cys Ser Phe Ile Ala Gln Val Leu Pro Ser Arg Phe Leu Asn
 275 280 285
 Trp Ile Gln Glu Arg Lys Leu Asn Lys Arg Phe Asn His Glu Asp Tyr
 290 295 300
 Gly Leu Ser Ile Thr Lys Gly Lys Lys Ala Lys Phe Ile Val Asn Asp
 305 310 315 320
 Glu Leu Pro Asn Cys Ile Leu Cys Gly Ala Ile Thr Met Lys Thr Ser
 325 330 335
 Val Ile Glu Phe Thr Glu Thr Ser Ala Val Phe Glu Asp Gly Thr Val
 340 345 350
 Glu Glu Asn Ile Asp Val Val Ile Phe Thr Thr Gly Tyr Thr Phe Ser
 355 360 365
 Phe Pro Phe Phe Glu Glu Pro Leu Lys Ser Leu Cys Thr Lys Lys Ile
 370 375 380
 Phe Leu Tyr Lys Gln Val Phe Pro Leu Asn Leu Glu Arg Ala Thr Leu
 385 390 395 400
 Ala Ile Ile Gly Leu Ile Gly Leu Lys Gly Ser Ile Leu Ser Gly Thr
 405 410 415
 Glu Leu Gln Ala Arg Trp Val Thr Arg Val Phe Lys Gly Leu Cys Lys

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      420      425      430
Arg Pro Ala Ser Gln Lys Leu Met Met Glu Ala Thr Glu Lys Glu Gln
      435      440      445
Leu Ile Lys Arg Gly Val Phe Lys Asp Thr Ser Lys Asp Lys Phe Asp
      450      455      460
Tyr Ile Ala Tyr Met Asp Asp Ile Ala Ala Cys Ile Gly Thr Lys Pro
465      470      475      480
Ser Ile Pro Leu Leu Phe Leu Lys Asp Pro Arg Leu Ala Trp Glu Val
      485      490      495
Phe Phe Gly Pro Cys Thr Pro Tyr Gln Tyr Arg Leu Met Gly Pro Gly
      500      505      510
Lys Trp Asp Gly Ala Arg Asn Ala Ile Leu Thr Gln Trp Asp Arg Thr
      515      520      525
Leu Lys Pro Leu Lys Thr Arg Ile Val Pro Asp Ser Ser Lys Ala Trp
530      535      540
Pro Ser Met Ser His Tyr Leu Lys Ala Trp Gly Ala Pro Val Leu Leu
545      550      555      560
Ala Ser Leu Leu Leu Ile Cys Lys Ser Ser Leu Phe Leu Lys Leu Val
      565      570      575
Arg Asp Lys Leu Gln Asp Arg Met Ser Pro Tyr Leu Val Ser Leu Trp
      580      585      590
Arg Gly
594

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<210> 3440
<211> 1178
<212> PRT
<213> Homo sapiens

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      <400> 3440
Ile Met Pro Cys Gly Ser Ser Arg Leu Leu Arg Gly Cys Trp Thr His
  1      5      10      15
Pro Asn Glu Pro Val Ser Asp Leu Ser Tyr Phe Asp Cys Ile Glu Ser
      20      25      30
Val Met Glu Asn Ser Lys Val Leu Gly Glu Ser Met Ala Gly Ile Ser
      35      40      45
Gln Asn Ala Lys Thr Gly Asp Leu Pro Ala Phe Gly Glu Cys Val Gly
      50      55      60
Ile Ala Ser Lys Ala Leu Cys Gly Leu Thr Glu Ala Ala Ala Gln Ala
65      70      75      80
Ala Tyr Leu Val Gly Ile Phe Asp Pro Asn Ser Gln Ala Gly His Gln
      85      90      95
Gly Leu Val Asp Pro Ile Gln Phe Ala Arg Ala Asn Gln Ala Ile Gln
      100      105      110
Met Ala Cys Gln Asn Leu Val Asp Pro Gly Ser Ser Pro Ser Gln Val
      115      120      125
Leu Ser Ala Ala Thr Ile Val Ala Lys His Thr Ser Ala Leu Cys Asn
      130      135      140
Ala Cys Arg Ile Ala Ser Ser Lys Thr Ala Asn Pro Val Ala Lys Arg
145      150      155      160
His Phe Val Gln Ser Ala Lys Glu Val Ala Asn Ser Thr Ala Asn Leu
      165      170      175
Val Lys Thr Ile Lys Ala Leu Asp Gly Asp Phe Ser Glu Asp Asn Arg
      180      185      190
Asn Lys Cys Arg Ile Ala Thr Ala Pro Leu Ile Glu Ala Val Glu Asn
      195      200      205
Leu Thr Ala Phe Ala Ser Asn Pro Glu Phe Val Ser Ile Pro Ala Gln
210      215      220
Ile Ser Ser Glu Gly Ser Gln Ala Gln Glu Pro Ile Leu Val Ser Ala
225      230      235      240
Lys Pro Met Leu Glu Ser Ser Ser Tyr Leu Ile Arg Thr Ala Arg Ser

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					245					250				255	
Leu	Ala	Ile	Asn	Pro	Lys	Asp	Pro	Pro	Thr	Trp	Ser	Val	Leu	Ala	Gly
			260					265					270		
His	Ser	His	Thr	Val	Ser	Asp	Ser	Ile	Lys	Ser	Leu	Ile	Thr	Ser	Ile
		275					280					285			
Arg	Asp	Lys	Ala	Pro	Gly	Gln	Arg	Glu	Cys	Asp	Tyr	Ser	Ile	Asp	Gly
	290				310	295				300					
Ile	Asn	Arg	Cys	Ile	Arg	Asp	Ile	Glu	Gln	Ala	Ser	Leu	Ala	Ala	Val
305					325					315					320
Ser	Gln	Ser	Leu	Ala	Thr	Arg	Asp	Asp	Ile	Ser	Val	Glu	Ala	Leu	Gln
					340			330						335	
Glu	Gln	Leu	Thr	Ser	Val	Val	Gln	Glu	Ile	Gly	His	Leu	Ile	Asp	Pro
					345			345				350			
Ile	Ala	Thr	Ala	Ala	Arg	Gly	Glu	Ala	Ala	Gln	Leu	Gly	His	Lys	Gly
		355				360						365			
Thr	Gln	Leu	Ala	Ser	Tyr	Phe	Glu	Pro	Leu	Ile	Leu	Ala	Ala	Val	Gly
	370				375					380					
Val	Ala	Ser	Lys	Ile	Leu	Asp	His	Gln	Gln	Gln	Met	Thr	Val	Leu	Asp
385					390					395					400
Gln	Thr	Lys	Thr	Leu	Ala	Glu	Ser	Ala	Leu	Gln	Met	Leu	Tyr	Ala	Ala
					405				410					415	
Lys	Glu	Gly	Gly	Gly	Asn	Pro	Lys	Ala	Gln	His	Thr	His	Asp	Ala	Ile
				420				425				430			
Thr	Glu	Ala	Ala	Gln	Leu	Met	Lys	Glu	Ala	Val	Asp	Asp	Ile	Met	Val
					435		440					445			
Thr	Leu	Asn	Glu	Ala	Ala	Ser	Glu	Val	Gly	Leu	Val	Gly	Gly	Met	Val
	450				455					460					
Asp	Ala	Ile	Ala	Glu	Ala	Met	Ser	Lys	Leu	Asp	Glu	Gly	Thr	Pro	Pro
465					470					475					480
Glu	Pro	Lys	Gly	Thr	Phe	Val	Asp	Tyr	Gln	Thr	Thr	Val	Val	Lys	Tyr
					485				490					495	
Ser	Lys	Ala	Ile	Ala	Val	Thr	Ala	Gln	Glu	Met	Met	Thr	Lys	Ser	Val
					500			505				510			
Thr	Asn	Pro	Glu	Glu	Leu	Gly	Gly	Leu	Ala	Ser	Gln	Met	Thr	Ser	Asp
					515		520					525			
Tyr	Gly	His	Leu	Ala	Phe	Gln	Gly	Gln	Met	Ala	Ala	Ala	Thr	Ala	Glu
	530				535						540				
Pro	Glu	Glu	Ile	Gly	Phe	Gln	Ile	Arg	Thr	Arg	Val	Gln	Asp	Leu	Gly
545					550					555					560
His	Gly	Cys	Ile	Phe	Leu	Val	Gln	Lys	Ala	Gly	Ala	Leu	Gln	Val	Cys
					565				570					575	
Pro	Thr	Asp	Ser	Tyr	Thr	Lys	Arg	Glu	Leu	Ile	Glu	Cys	Ala	Arg	Ala
					580			585				590			
Val	Thr	Glu	Lys	Val	Ser	Leu	Val	Leu	Ser	Ala	Leu	Gln	Ala	Gly	Asn
					595		600					605			
Lys	Gly	Thr	Gln	Ala	Cys	Ile	Thr	Ala	Ala	Thr	Ala	Val	Ser	Gly	Ile
	610				615						620				
Ile	Ala	Asp	Leu	Asp	Thr	Thr	Ile	Met	Phe	Ala	Thr	Ala	Gly	Thr	Leu
625					630				635						640
Asn	Ala	Glu	Asn	Ser	Glu	Thr	Phe	Ala	Asp	His	Arg	Glu	Asn	Ile	Leu
					645				650					655	
Lys	Thr	Ala	Lys	Ala	Leu	Val	Glu	Asp	Thr	Lys	Leu	Leu	Val	Ser	Gly
					660			665				670			
Ala	Ala	Ser	Thr	Pro	Asp	Lys	Leu	Ala	Gln	Ala	Ala	Gln	Ser	Ser	Ala
					675			680				685			
Ala	Thr	Ile	Thr	Gln	Leu	Ala	Glu	Val	Val	Lys	Leu	Gly	Ala	Ala	Ser
					690		695				700				
Leu	Gly	Ser	Asp	Asp	Pro	Glu	Thr	Gln	Val	Val	Leu	Ile	Asn	Ala	Ile
705					710					715					720
Lys	Asp	Val	Ala	Lys	Ala	Leu	Ser	Asp	Leu	Ile	Ser	Ala	Thr	Lys	Gly
					725				730					735	
Ala	Ala	Ser	Lys	Pro	Val	Asp	Asp	Pro	Ser	Met	Tyr	Gln	Leu	Lys	Gly
					740			745				750			
Ala	Ala	Lys	Val	Met	Val	Thr	Asn	Val	Thr	Ser	Leu	Leu	Lys	Thr	Val

755	760	765
Lys Ala Val Glu Asp Glu	Ala Thr Arg Gly Thr	Arg Ala Leu Glu Ala
770	775	780
Thr Ile Glu Cys Ile Lys	Gln Glu Leu Thr Val	Phe Gln Ser Lys Asp
785	790	795
Val Pro Glu Lys Thr Ser	Ser Pro Glu Glu Ser	Ile Arg Met Thr Lys
805	810	815
Gly Ile Thr Met Ala Thr	Ala Lys Ala Val Ala	Ala Gly Asn Ser Cys
820	825	830
Arg Gln Glu Asp Val Ile	Ala Thr Ala Asn Leu	Ser Arg Lys Ala Val
835	840	845
Ser Asp Met Leu Thr Ala	Cys Lys Gln Ala Ser	Phe His Pro Asp Val
850	855	860
Ser Asp Glu Val Arg Thr	Arg Ala Leu Arg Phe	Gly Thr Glu Cys Thr
865	870	875
Leu Gly Tyr Leu Asp Leu	Leu Glu His Val Leu	Val Ile Leu Gln Lys
885	890	895
Pro Thr Pro Glu Leu Lys	Gln Gln Leu Ala Ala	Phe Ser Lys Arg Val
900	905	910
Ala Gly Ala Val Thr Glu	Leu Ile Gln Ala Ala	Glu Ala Met Lys Gly
915	920	925
Thr Glu Trp Val Asp Pro	Glu Asp Pro Thr Val	Ile Ala Glu Thr Glu
930	935	940
Leu Leu Gly Ala Ala Ala	Ser Ile Glu Ala Ala	Ala Lys Lys Leu Glu
945	950	955
Gln Leu Lys Pro Arg Ala	Lys Pro Lys Gln Ala	Asp Glu Thr Leu Asp
965	970	975
Phe Glu Glu Gln Ile Leu	Glu Ala Ala Lys Ser	Ile Ala Ala Thr
980	985	990
Ser Ala Leu Val Lys Ser	Ala Ser Ala Ala Gln	Arg Glu Leu Val Ala
995	1000	1005
Gln Gly Lys Val Gly Ser	Ile Pro Ala Asn Ala	Ala Asp Asp Gly Gln
1010	1015	1020
Trp Ser Gln Gly Leu Ile	Ser Ala Ala Arg Met	Val Ala Ala Thr
1025	1030	1035
Ser Ser Leu Cys Glu Ala	Ala Asn Ala Ser Val	Gln Gly His Ala Ser
1045	1050	1055
Glu Glu Lys Leu Ile Ser	Ser Ala Lys Gln Val	Ala Ala Ser Thr Ala
1060	1065	1070
Gln Leu Leu Val Ala Cys	Lys Val Lys Ala Asp	Gln Asp Ser Glu Ala
1075	1080	1085
Met Arg Arg Leu Gln Ala	Ala Gly Asn Ala Val	Lys Arg Ala Ser Asp
1090	1095	1100
Asn Leu Val Arg Ala Ala	Gln Lys Ala Ala Phe	Gly Lys Ala Asp Asp
1105	1110	1115
Asp Asp Val Val Val Lys	Thr Lys Phe Val Gly	Gly Ile Ala Gln Ile
1125	1130	1135
Ile Ala Ala Gln Glu Glu	Met Leu Lys Lys Glu	Arg Glu Leu Glu Glu
1140	1145	1150
Ala Arg Lys Lys Leu Ala	Gln Ile Arg Gln Gln	Gln Tyr Lys Phe Leu
1155	1160	1165
Pro Thr Glu Leu Arg Glu	Asp Glu Gly	
1170	1175	1177

<210> 3441

<211> S30

<212> PRT

<213> Homo sapiens

<400> 3441

Asn Ser Ala Arg Gly Gly Val Gly Val Arg Gly Ala Arg Ala Met Ala

1	5	10	15
Thr Val Gln Glu Lys Ala Ala Ala Leu Asn Leu Ser Ala Leu His Ser			
20	25	30	
Pro Ala His Arg Pro Pro Gly Phe Ser Val Ala Gln Lys Pro Phe Gly			
35	40	45	
Ala Thr Tyr Val Trp Ser Ser Ile Ile Asn Thr Leu Gln Thr Gln Val			
50	55	60	
Glu Val Lys Lys Arg Arg His Arg Leu Lys Arg His Asn Asp Cys Phe			
65	70	75	80
Val Gly Ser Glu Ala Val Asp Val Ile Phe Ser His Leu Ile Gln Asn			
85	90	95	
Lys Tyr Phe Gly Asp Val Asp Ile Pro Arg Ala Lys Val Val Arg Val			
100	105	110	
Cys Gln Ala Leu Met Asp Tyr Lys Val Phe Glu Ala Val Pro Thr Lys			
115	120	125	
Val Phe Gly Lys Asp Lys Lys Pro Thr Phe Glu Asp Ser Ser Cys Ser			
130	135	140	
Leu Tyr Arg Phe Thr Thr Ile Pro Asn Gln Asp Ser Gln Leu Gly Lys			
145	150	155	160
Glu Asn Lys Leu Tyr Ser Pro Ala Arg Tyr Ala Asp Ala Leu Phe Lys			
165	170	175	
Ser Ser Asp Ile Arg Ser Ala Ser Leu Glu Asp Leu Trp Glu Asn Leu			
180	185	190	
Ser Leu Lys Pro Ala Asn Ser Pro His Val Asn Ile Ser Thr Thr Leu			
195	200	205	
Ser Pro Gln Val Ile Asn Glu Val Trp Gln Glu Glu Thr Ile Gly Arg			
210	215	220	
Leu Leu Gln Leu Val Asp Leu Pro Leu Leu Asp Ser Leu Leu Lys Gln			
225	230	235	240
Gln Glu Ala Val Pro Lys Ile Pro Gln Pro Lys Arg Gln Ser Thr Met			
245	250	255	
Val Asn Ser Ser Asn Tyr Leu Asp Arg Gly Ile Leu Lys Ala Tyr Ser			
260	265	270	
Asp Ser Gln Glu Asp Glu Trp Leu Ser Ala Ala Ile Asp Cys Leu Glu			
275	280	285	
Tyr Leu Pro Asp Gln Met Val Val Glu Ile Ser Arg Ser Phe Pro Glu			
290	295	300	
Gln Pro Asp Arg Thr Asp Leu Val Lys Glu Leu Phe Asp Ala Ile			
305	310	315	320
Gly Arg Tyr Tyr Ser Ser Arg Glu Pro Leu Leu Asn His Leu Ser Asp			
325	330	335	
Val His Asn Gly Ile Ala Glu Leu Leu Val Asn Gly Lys Thr Glu Ile			
340	345	350	
Ala Leu Glu Ala Thr Gln Leu Leu Lys Leu Leu Asp Phe Gln Asn			
355	360	365	
Arg Glu Glu Phe Arg Arg Leu Leu Tyr Phe Met Ala Val Ala Ala Asn			
370	375	380	
Pro Ser Glu Phe Lys Leu Gln Lys Glu Ser Asp Asn Arg Met Val Val			
385	390	395	400
Lys Arg Ile Phe Ser Lys Ala Ile Val Asp Asn Lys Asn Leu Ser Lys			
405	410	415	
Gly Lys Thr Asp Leu Leu Val Leu Phe Leu Met Asp His Gln Lys Asp			
420	425	430	
Val Phe Lys Ile Pro Gly Thr Leu His Lys Ile Val Ser Val Lys Leu			
435	440	445	
Met Ala Ile Gln Asn Gly Arg Asp Pro Asn Arg Asp Ala Gly Tyr Ile			
450	455	460	
Tyr Cys Gln Arg Ile Asp Gln Arg Asp Tyr Ser Asn Ile Thr Glu Lys			
465	470	475	480
Thr Thr Ile Asp Glu Leu Leu Tyr Leu Leu Lys Thr Leu Asp Glu Asp			
485	490	495	
Ser Lys Leu Ser Arg Lys Glu Lys Lys Lys Leu Leu Gly Gln Phe Tyr			
500	505	510	
Lys Cys His Pro Asp Ile Phe Ile Glu His Phe Gly Asp			

515

520

525

<210> 3442
 <211> 223
 <212> PRT
 <213> Homo sapiens

<400> 3442
 Ser Pro Ala Ser Gly His Cys Arg Leu Asn Gly Ala Ala Val Ala Met
 1 5 10 15
 Phe Gly Cys Leu Val Ala Gly Arg Leu Val Gln Thr Ala Ala Gln Gln
 20 25 30
 Val Ala Glu Asp Lys Phe Val Phe Asp Leu Pro Asp Tyr Glu Ser Ile
 35 40 45
 Asn His Val Val Val Phe Met Leu Gly Thr Ile Pro Phe Pro Glu Gly
 50 55 60
 Met Gly Gly Ser Val Tyr Phe Ser Tyr Pro Asp Ser Asn Gly Met Pro
 65 70 75 80
 Val Trp Gln Leu Leu Gly Phe Val Thr Asn Gly Lys Pro Ser Ala Ile
 85 90 95
 Phe Lys Ile Ser Gly Leu Lys Ser Gly Glu Gly Ser Gln His Pro Phe
 100 105 110
 Gly Ala Met Asn Ile Val Arg Thr Pro Ser Val Ala Gln Ile Gly Ile
 115 120 125
 Ser Val Glu Leu Leu Asp Ser Met Ala Gln Gln Thr Pro Val Gly Asn
 130 135 140
 Ala Ala Val Ser Ser Val Asp Ser Phe Thr Gln Phe Thr Gln Lys Met
 145 150 155 160
 Leu Asp Asn Phe Tyr Asn Phe Ala Ser Ser Phe Ala Val Ser Gln Val
 165 170 175
 Pro Asp Asp Thr Gln Arg Pro Ser Glu Met Phe Ile Pro Ala Asn Val
 180 185 190
 Val Leu Lys Trp Tyr Glu Asn Phe Gln Arg Arg Thr Ser Thr Glu Pro
 195 200 205
 Ser Leu Leu Glu Asn Ile Ile Trp Ile Lys Ile Asn Phe
 210 215 220 221

<210> 3443
 <211> 457
 <212> PRT
 <213> Homo sapiens

<400> 3443
 Ser Trp His Val Arg Arg Arg Trp Leu Glu Ala Thr Met Ala Gly Gly
 1 5 10 15
 Met Lys Val Ala Val Ser Pro Ala Val Gly Pro Gly Pro Trp Gly Ser
 20 25 30
 Gly Val Gly Gly Gly Gly Thr Val Arg Leu Leu Leu Ile Leu Ser Gly
 35 40 45
 Cys Leu Val Tyr Gly Thr Ala Glu Thr Asp Val Asn Val Val Met Leu
 50 55 60
 Gln Glu Ser Gln Val Cys Glu Lys Arg Ala Ser Gln Gln Phe Cys Tyr
 65 70 75 80
 Thr Asn Val Leu Ile Pro Gln Trp His Asp Ile Trp Thr Arg Ile Gln
 85 90 95
 Ile Arg Val Asn Ser Ser Arg Leu Val Arg Val Thr Gln Val Glu Asn
 100 105 110
 Glu Glu Lys Leu Lys Glu Leu Glu Gln Phe Ser Ile Trp Asn Phe Phe

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      115      120      125
Ser Ser Phe Leu Lys Glu Lys Leu Asn Asp Thr Tyr Val Asn Val Gly
  130      135      140
Leu Tyr Ser Thr Lys Thr Cys Leu Lys Val Glu Ile Ile Glu Lys Asp
  145      150      155      160
Thr Lys Tyr Ser Val Ile Val Ile Arg Arg Phe Asp Pro Lys Leu Phe
      165      170      175
Leu Val Phe Leu Leu Gly Leu Met Leu Phe Phe Cys Gly Asp Leu Leu
      180      185      190
Ser Arg Ser Gln Ile Phe Tyr Tyr Ser Thr Gly Met Thr Val Gly Ile
      195      200      205
Val Ala Ser Leu Leu Ile Ile Ile Phe Ile Leu Ser Lys Phe Met Pro
      210      215      220
Lys Lys Ser Pro Ile Tyr Val Ile Leu Val Gly Gly Trp Ser Phe Ser
  225      230      235      240
Leu Tyr Leu Ile Gln Leu Val Phe Lys Asn Leu Gln Glu Ile Trp Arg
      245      250      255
Cys Tyr Trp Gln Tyr Leu Leu Ser Tyr Val Leu Thr Val Gly Phe Met
      260      265      270
Ser Phe Ala Val Cys Tyr Lys Tyr Gly Pro Leu Glu Asn Glu Arg Ser
      275      280      285
Ile Asn Leu Leu Thr Trp Thr Leu Gln Leu Met Gly Leu Cys Phe Met
      290      295      300
Tyr Ser Gly Ile Gln Ile Pro His Ile Ala Leu Ala Ile Ile Ile Ile
  305      310      315      320
Ala Leu Cys Thr Lys Asn Leu Glu His Pro Ile Gln Trp Leu Tyr Ile
      325      330      335
Thr Cys Arg Lys Val Cys Lys Gly Ala Glu Lys Pro Val Pro Pro Arg
      340      345      350
Leu Leu Thr Glu Glu Glu Tyr Arg Ile Gln Gly Glu Val Glu Thr Arg
      355      360      365
Lys Ala Leu Glu Glu Leu Arg Glu Phe Cys Asn Ser Pro Asp Cys Ser
      370      375      380
Ala Trp Lys Thr Val Ser Arg Ile Gln Ser Pro Lys Arg Phe Ala Asp
  385      390      395      400
Phe Val Glu Gly Ser Ser His Leu Thr Pro Asn Glu Val Ser Val His
      405      410      415
Glu Gln Glu Tyr Gly Leu Gly Ser Ile Ile Ala Gln Asp Glu Ile Tyr
      420      425      430
Glu Glu Ala Ser Ser Glu Glu Glu Asp Ser Tyr Ser Arg Cys Pro Ala
      435      440      445
Ile Thr Gln Asn Asn Phe Leu Thr
  450      455 456

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<210> 3444

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3444

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Lys Gly Leu Glu Arg Thr Cys Cys Ala Met Glu Glu Ser Asp Ser Glu
  1      5      10      15
Lys Thr Thr Glu Lys Glu Asn Leu Gly Pro Arg Met Asp Pro Pro Leu
      20      25      30
Gly Glu Pro Gly Gly Ser Leu Gly Trp Val Leu Pro Asn Thr Ala Met
      35      40      45
Lys Lys Lys Val Leu Leu Met Gly Lys Ser Gly Ser Gly Lys Thr Ser
      50      55      60
Met Arg Ser Ile Ile Phe Ala Asn Tyr Ile Ala Arg Asp Thr Arg Arg
      65      70      75      80
Leu Gly Ala Thr Ile Leu Asp Arg Ile His Ser Leu Gln Ile Asn Ser

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				85					90				95				
Ser	Leu	Ser	Thr	Tyr	Ser	Leu	Val	Asp	Ser	Val	Gly	Asn	Thr	Lys	Thr		
			100					105					110				
Phe	Asp	Val	Glu	His	Ser	His	Val	Arg	Phe	Leu	Gly	Asn	Leu	Val	Leu		
		115					120					125					
Asn	Leu	Trp	Asp	Cys	Gly	Gly	Gln	Asp	Thr	Phe	Met	Glu	Asn	Tyr	Phe		
	130					135					140						
Thr	Ser	Gln	Arg	Asp	Asn	Ile	Phe	Arg	Asn	Val	Glu	Val	Leu	Ile	Tyr		
145					150					155				160			
Val	Phe	Asp	Val	Glu	Ser	Arg	Glu	Leu	Glu	Lys	Asp	Met	His	Tyr	Tyr		
			165						170					175			
Gln	Ser	Cys	Leu	Glu	Ala	Ile	Leu	Gln	Asn	Ser	Pro	Asp	Ala	Lys	Ile		
		180						185					190				
Phe	Cys	Leu	Val	His	Lys	Met	Asp	Leu	Val	Gln	Glu	Asp	Gln	Arg	Asp		
	195						200					205					
Leu	Ile	Phe	Lys	Glu	Arg	Glu	Glu	Asp	Leu	Arg	Arg	Leu	Ser	Arg	Pro		
	210					215					220						
Leu	Glu	Cys	Ser	Cys	Phe	Arg	Thr	Ser	Ile	Trp	Asp	Glu	Thr	Leu	Tyr		
225					230					235				240			
Lys	Ala	Trp	Ser	Ser	Ile	Val	Tyr	Gln	Leu	Ile	Pro	Asn	Val	Gln	Gln		
			245					250						255			
Leu	Glu	Met	Asn	Leu	Arg	Asn	Phe	Ala	Glu	Ile	Ile	Glu	Ala	Asp	Glu		
		260					265						270				
Val	Leu	Leu	Phe	Glu	Arg	Ala	Thr	Phe	Leu	Val	Ile	Ser	His	Tyr	Gln		
	275						280					285					
Cys	Lys	Glu	Gln	Arg	Asp	Ala	His	Arg	Phe	Glu	Lys	Ile	Ser	Asn	Ile		
	290					295					300						
Ile	Lys	Gln	Phe	Lys	Leu	Ser	Cys	Ser	Lys	Leu	Ala	Ala	Ser	Phe	Gln		
305					310					315				320			
Ser	Met	Glu	Val	Arg	Asn	Ser	Asn	Phe	Ala	Ala	Phe	Ile	Asp	Ile	Phe		
			325					330						335			
Thr	Ser	Asn	Thr	Tyr	Val	Met	Val	Val	Met	Ser	Asp	Pro	Ser	Ile	Pro		
		340					345						350				
Ser	Ala	Ala	Thr	Leu	Ile	Asn	Ile	Arg	Asn	Ala	Arg	Lys	His	Phe	Glu		
	355					360						365					
Lys	Leu	Glu	Arg	Val	Asp	Gly	Pro	Lys	Gln	Cys	Leu	Leu	Met	Arg			
	370					375					380			383			

<210> 3445

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3445

Lys	Gly	Leu	Glu	Arg	Thr	Cys	Cys	Ala	Met	Glu	Glu	Ser	Asp	Ser	Glu		
1				5					10				15				
Lys	Thr	Thr	Glu	Lys	Glu	Asn	Leu	Gly	Pro	Arg	Met	Asp	Pro	Pro	Leu		
		20						25					30				
Gly	Glu	Pro	Gly	Gly	Ser	Leu	Gly	Trp	Val	Leu	Pro	Asn	Thr	Ala	Met		
	35						40					45					
Lys	Lys	Lys	Val	Leu	Leu	Met	Gly	Lys	Ser	Gly	Ser	Gly	Lys	Thr	Ser		
	50					55					60						
Met	Arg	Ser	Ile	Ile	Phe	Ala	Asn	Tyr	Ile	Ala	Arg	Asp	Thr	Arg	Arg		
	65				70					75				80			
Leu	Gly	Ala	Thr	Ile	Leu	Asp	Arg	Ile	His	Ser	Leu	Gln	Ile	Asn	Ser		
			85					90						95			
Ser	Leu	Ser	Thr	Tyr	Ser	Leu	Val	Asp	Ser	Val	Gly	Asn	Thr	Lys	Thr		
	100							105					110				
Phe	Asp	Val	Glu	His	Ser	His	Val	Arg	Phe	Leu	Gly	Asn	Leu	Val	Leu		
	115						120					125					
Asn	Leu	Trp	Asp	Cys	Gly	Gly	Gln	Asp	Thr	Phe	Met	Glu	Asn	Tyr	Phe		

130	135	140
Thr Ser Gln Arg Asp Asn	Ile Phe Arg Asn Val	Glu Val Leu Ile Tyr
145	150	155
Val Phe Asp Val Glu Ser	Arg Glu Leu Glu Lys	Asp Met His Tyr Tyr
165	170	175
Gln Ser Cys Leu Glu Ala	Ile Leu Gln Asn Ser	Pro Asp Ala Lys Ile
180	185	190
Phe Cys Leu Val His Lys	Met Asp Leu Val Gln	Glu Asp Gln Arg Asp
195	200	205
Leu Ile Phe Lys Glu Arg	Glu Glu Asp Leu Arg	Arg Leu Ser Arg Pro
210	215	220
Leu Glu Cys Ser Cys Phe	Arg Thr Ser Ile Trp	Asp Glu Thr Leu Tyr
225	230	235
Lys Ala Trp Ser Ser Ile	Val Tyr Gln Leu Ile	Pro Asn Val Gln Gln
245	250	255
Leu Glu Met Asn Leu Arg	Asn Phe Ala Glu Ile	Ile Glu Ala Asp Glu
260	265	270
Val Leu Leu Phe Glu Arg	Ala Thr Phe Leu Val	Ile Ser His Tyr Gln
275	280	285
Cys Lys Glu Gln Arg Asp	Ala His Arg Phe Glu	Lys Ile Ser Asn Ile
290	295	300
Ile Lys Gln Phe Lys Leu	Ser Cys Ser Lys Leu	Ala Ala Ser Phe Gln
305	310	315
Ser Met Glu Val Arg Asn	Ser Asn Phe Ala Ala	Phe Ile Asp Ile Phe
325	330	335
Thr Ser Asn Thr Tyr Val	Met Val Val Met Ser	Asp Pro Ser Ile Pro
340	345	350
Ser Ala Ala Thr Leu Ile	Asn Ile Arg Asn Ala	Arg Lys His Phe Glu
355	360	365
Lys Leu Glu Arg Val Asp	Gly Pro Lys Gln Cys	Leu Leu Met Arg
370	375	380
		383

<210> 3446

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3446

Lys Gly Leu Glu Arg Thr	Cys Cys Ala Met Glu	Glu Ser Asp Ser Glu
1	5	10
Lys Thr Thr Glu Lys Glu	Asn Leu Gly Pro Arg	Met Asp Pro Pro Leu
20	25	30
Gly Glu Pro Gly Gly Ser	Leu Gly Trp Val Leu	Pro Asn Thr Ala Met
35	40	45
Lys Lys Lys Val Leu Leu	Met Gly Lys Ser Gly	Ser Gly Lys Thr Ser
50	55	60
Met Arg Ser Ile Ile Phe	Ala Asn Tyr Ile Ala	Arg Asp Thr Arg Arg
65	70	75
Leu Gly Ala Thr Ile Leu	Asp Arg Ile His Ser	Leu Gln Ile Asn Ser
85	90	95
Ser Leu Ser Thr Tyr Ser	Leu Val Asp Ser Val	Gly Asn Thr Lys Thr
100	105	110
Phe Asp Val Glu His Ser	His Val Arg Phe Leu	Gly Asn Leu Val Leu
115	120	125
Asn Leu Trp Asp Cys Gly	Gly Gln Asp Thr Phe	Met Glu Asn Tyr Phe
130	135	140
Thr Ser Gln Arg Asp Asn	Ile Phe Arg Asn Val	Glu Val Leu Ile Tyr
145	150	155
Val Phe Asp Val Glu Ser	Arg Glu Leu Glu Lys	Asp Met His Tyr Tyr
165	170	175
Gln Ser Cys Leu Glu Ala	Ile Leu Gln Asn Ser	Pro Asp Ala Lys Ile

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<210> 3447
<211> 977
<212> PRT
<213> Homo sapiens
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<400> 3447															
Val 1	Leu	Leu	Gly	Pro 5	Leu	Trp	Asp	Lys	Leu 10	Ser	Thr	Ala	Asp	His 15	Pro
Val	Ile	Val	Thr 20	Met	Ala	Ser	Lys	Arg 25	Lys	Ser	Thr	Thr	Pro 30	Cys	Met
Ile	Pro	Val	Lys 35	Thr	Val	Val	Leu 40	Gln	Asp	Ala	Ser	Met	Glu 45	Ala	Gln
Pro	Ala	Glu	Thr 50	Leu	Pro	Glu	Gly 55	Pro	Gln	Gln	Asp 60	Leu	Pro	Pro	Glu
Ala 65	Ser	Ala	Ala	Ser	Ser	Glu	Ala	Ala	Gln	Asn 75	Pro	Ser	Ser	Thr	Asp 80
Gly	Ser	Thr	Leu 85	Ala	Asn 85	Gly	His	Arg	Ser 90	Thr	Leu	Asp	Gly 95	Tyr	Leu
Tyr	Ser	Cys	Lys 100	Tyr	Cys	Asp	Phe	Arg 105	Ser	His	Asp	Met	Thr 110	Gln	Phe
Val	Gly	His 115	Met	Asn	Ser	Glu	His 120	Thr	Asp	Phe	Asn 125	Lys	Asp	Pro	Thr
Phe 130	Val	Cys	Ser	Gly	Cys	Ser 135	Phe	Leu	Ala	Lys	Thr 140	Pro	Glu	Gly	Leu
Ser 145	Leu	His	Asn 150	Ala	Thr	Cys	His	Ser	Gly	Glu 155	Ala	Ser	Phe	Val	Trp 160
Asn	Val	Ala	Lys 165	Pro	Asp	Asn	His	Val	Val 170	Val	Glu	Gln	Ser	Ile 175	Pro
Glu	Ser	Thr	Ser 180	Thr	Pro	Asp	Leu	Ala 185	Gly	Glu	Pro	Ser	Ala 190	Glu	Gly
Ala	Asp	Gly 195	Gln	Ala	Glu	Ile	Ile 200	Ile	Thr	Lys	Thr	Pro	Ile 205	Met	Lys
Ile	Met	Lys 210	Gly	Lys	Ala	Glu 215	Ala	Lys	Lys	Ile	His 220	Thr	Leu	Lys	Glu
Asn	Val	Pro	Ser	Gln	Pro	Val	Gly	Glu	Ala	Leu	Pro	Lys	Leu	Ser	Thr

225		230		235		240									
Gly	Glu	Met	Glu	Val	Arg	Glu	Gly	Asp	His	Ser	Phe	Ile	Asn	Gly	Ala
				245					250					255	
Val	Pro	Val	Arg	Gln	Ala	Ser	Ala	Ser	Ser	Ala	Lys	Asn	Pro	His	Ala
				260					265					270	
Ala	Asn	Gly	Pro	Leu	Ile	Gly	Thr	Val	Pro	Val	Leu	Pro	Ala	Gly	Ile
		275					280					285			
Ala	Gln	Phe	Leu	Ser	Leu	Gln	Gln	Gln	Pro	Pro	Val	His	Ala	Gln	His
		290				295					300				
His	Val	His	Gln	Pro	Leu	Pro	Thr	Ala	Lys	Ala	Leu	Pro	Lys	Val	Met
305					310					315					320
Ile	Pro	Leu	Ser	Ser	Ile	Pro	Thr	Tyr	Ser	Ala	Ala	Met	Asp	Ser	Asn
				325					330					335	
Ser	Phe	Leu	Lys	Asn	Ser	Phe	His	Lys	Phe	Pro	Tyr	Pro	Thr	Lys	Ala
		340						345					350		
Glu	Leu	Cys	Tyr	Leu	Thr	Val	Val	Thr	Lys	Tyr	Pro	Glu	Glu	Gln	Leu
		355					360					365			
Lys	Ile	Trp	Phe	Thr	Ala	Gln	Arg	Leu	Lys	Gln	Gly	Ile	Ser	Trp	Ser
	370					375					380				
Pro	Glu	Glu	Ile	Glu	Asp	Ala	Arg	Lys	Lys	Met	Phe	Asn	Thr	Val	Ile
385					390					395					400
Gln	Ser	Val	Pro	Gln	Pro	Thr	Ile	Thr	Val	Leu	Asn	Thr	Pro	Leu	Val
				405					410					415	
Ala	Ser	Ala	Gly	Asn	Val	Gln	His	Leu	Ile	Gln	Ala	Ala	Leu	Pro	Gly
		420						425					430		
His	Val	Val	Gly	Gln	Pro	Glu	Gly	Thr	Gly	Gly	Gly	Leu	Leu	Val	Thr
		435					440					445			
Gln	Pro	Leu	Met	Ala	Asn	Gly	Leu	Gln	Ala	Thr	Ser	Ser	Pro	Leu	Pro
	450					455					460				
Leu	Thr	Val	Thr	Ser	Val	Pro	Lys	Gln	Pro	Gly	Val	Ala	Pro	Ile	Asn
465					470					475					480
Thr	Val	Cys	Ser	Asn	Thr	Thr	Ser	Ala	Val	Lys	Val	Val	Asn	Ala	Ala
				485					490					495	
Gln	Ser	Leu	Leu	Thr	Ala	Cys	Pro	Ser	Ile	Thr	Ser	Gln	Ala	Phe	Leu
		500						505					510		
Asp	Ala	Ser	Ile	Tyr	Lys	Asn	Lys	Lys	Ser	His	Glu	Gln	Leu	Ser	Ala
		515					520					525			
Leu	Lys	Gly	Ser	Phe	Cys	Arg	Asn	Gln	Phe	Pro	Gly	Gln	Ser	Glu	Val
	530					535					540				
Glu	His	Leu	Thr	Lys	Val	Thr	Gly	Leu	Ser	Thr	Arg	Glu	Val	Arg	Lys
545					550					555					560
Trp	Phe	Ser	Asp	Arg	Arg	Tyr	His	Cys	Arg	Asn	Leu	Lys	Gly	Ser	Arg
				565					570					575	
Ala	Met	Ile	Pro	Gly	Asp	His	Arg	Ser	Ile	Ile	Ile	Asp	Ser	Val	Pro
		580						585					590		
Glu	Val	Ser	Phe	Ser	Pro	Ser	Ser	Lys	Val	Pro	Glu	Val	Thr	Cys	Ile
		595					600					605			
Pro	Thr	Thr	Ala	Thr	Leu	Ala	Thr	His	Pro	Ser	Ala	Lys	Arg	Gln	Ser
	610					615						620			
Trp	His	Gln	Thr	Pro	Asp	Phe	Thr	Pro	Thr	Lys	Tyr	Lys	Glu	Arg	Ala
625					630					635					640
Pro	Glu	Gln	Leu	Arg	Ala	Leu	Glu	Ser	Ser	Phe	Ala	Gln	Asn	Pro	Leu
				645					650					655	
Pro	Leu	Asp	Glu	Glu	Leu	Asp	Arg	Leu	Arg	Ser	Glu	Thr	Lys	Met	Thr
		660						665					670		
Arg	Arg	Glu	Ile	Asp	Ser	Trp	Phe	Ser	Glu	Arg	Arg	Lys	Lys	Val	Asn
		675					680					685			
Ala	Glu	Glu	Thr	Lys	Lys	Ala	Glu	Glu	Asn	Ala	Ser	Gln	Glu	Glu	Glu
	690					695					700				
Glu	Ala	Ala	Glu	Asp	Glu	Gly	Gly	Glu	Glu	Asp	Leu	Ala	Ser	Glu	Leu
705					710					715					720
Arg	Val	Ser	Gly	Glu	Asn	Gly	Ser	Leu	Glu	Met	Pro	Ser	Ser	His	Ile
				725					730					735	
Leu	Ala	Glu	Arg	Lys	Val	Ser	Pro	Ile	Lys	Ile	Asn	Leu	Lys	Asn	Leu

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<210> 3448
<211> 444
<212> PRT
<213> Homo sapiens
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<400> 3448															
Phe	Val	Ala	Arg	Ala	Glu	Lys	Gly	Phe	Arg	Thr	Arg	Glu	Ala	His	Leu
1				5					10					15	
Leu	Gln	Val	Ala	Gly	Val	Gly	Thr	Gly	Leu	Gln	Asn	Gly	Ala	Ser	Leu
			20					25					30		
Ser	Gly	Leu	Ala	Ser	Gly	Val	Met	Ala	Gln	Arg	Ala	Phe	Pro	Asn	Pro
			35				40					45			
Tyr	Ala	Asp	Tyr	Asn	Lys	Ser	Leu	Ala	Glu	Gly	Tyr	Phe	Asp	Ala	Ala
	50					55					60				
Gly	Arg	Leu	Thr	Pro	Glu	Phe	Ser	Gln	Arg	Leu	Thr	Asn	Lys	Ile	Arg
	65				70					75				80	
Glu	Leu	Leu	Gln	Gln	Met	Glu	Arg	Gly	Leu	Lys	Ser	Ala	Asp	Pro	Arg
				85					90					95	
Asp	Gly	Thr	Gly	Tyr	Thr	Gly	Trp	Ala	Gly	Ile	Ala	Val	Leu	Tyr	Leu
			100					105					110		
His	Leu	Tyr	Asp	Val	Phe	Gly	Asp	Pro	Ala	Tyr	Leu	Gln	Leu	Ala	His
		115					120					125			
Gly	Tyr	Val	Lys	Gln	Ser	Leu	Asn	Cys	Leu	Thr	Lys	Arg	Ser	Ile	Thr
	130					135					140				
Phe	Leu	Cys	Gly	Asp	Ala	Gly	Pro	Leu	Ala	Val	Ala	Ala	Val	Leu	Tyr
145					150					155				160	
His	Lys	Met	Asn	Asn	Glu	Lys	Gln	Ala	Glu	Asp	Cys	Ile	Thr	Arg	Leu
				165					170					175	
Ile	His	Leu	Asn	Lys	Ile	Asp	Pro	His	Ala	Pro	Asn	Glu	Met	Leu	Tyr

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<210> 3449
<211> 798
<212> PRT
<213> Homo sapiens
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5146

5147

675	680	685
Gly Leu Arg Gly Ser Ser Trp	Leu Gln Asp Gly Ser Ala Arg Ser Ser	
690	695	700
Pro Pro Leu Arg Thr Pro Asp Val Leu Glu Ser Ser Gly Pro Ala Val		
705	710	715
Arg Ser Gly Leu Asn Ala Thr Phe Met Ala Phe Asn Arg Gly Lys Arg		720
	725	730
Glu Gly Phe Phe Leu Lys Ser Val Glu Asn Ala Pro Leu Ala Lys Arg		735
	740	745
Arg Lys Gln Lys Leu Arg Ser Ala Thr Ala Ser Arg Arg Gly Ser Pro		750
	755	760
Ala Pro Ala Asn Pro Gly Arg Ala Pro Val Ala Ser Lys Gly Ala Pro		765
	770	775
Arg Arg Ala Asn Gly Pro Leu Pro Pro Ser		780
785	790	794

<210> 3450

<211> 502

<212> PRT

<213> Homo sapiens

<400> 3450

Lys Gly Thr Glu Met Asn Lys Ser Arg Trp Gln Ser Arg Arg Arg His	
1	5
Gly Arg Arg Ser His Gln Gln Asn Pro Trp Phe Arg Leu Arg Asp Ser	10
	20
Glu Asp Arg Ser Asp Ser Arg Ala Ala Gln Pro Ala His Asp Ser Gly	25
	35
His Gly Asp Asp Glu Ser Pro Ser Thr Ser Ser Gly Thr Ala Gly Thr	40
	50
Ser Ser Val Pro Glu Leu Pro Gly Phe Tyr Phe Asp Pro Glu Lys Lys	55
	65
Arg Tyr Phe Arg Leu Leu Pro Gly His Asn Asn Cys Asn Pro Leu Thr	60
	85
Lys Glu Ser Ile Arg Gln Lys Glu Met Glu Ser Lys Arg Leu Arg Leu	90
	100
Leu Gln Glu Glu Asp Arg Arg Lys Lys Ile Ala Arg Met Gly Phe Asn	105
	115
Ala Ser Ser Met Leu Arg Lys Ser Gln Leu Gly Phe Leu Asn Val Thr	120
	130
Asn Tyr Cys His Leu Ala His Glu Leu Arg Leu Ser Cys Met Glu Arg	135
	145
Lys Lys Val Gln Ile Arg Ser Met Asp Pro Ser Ala Leu Ala Ser Asp	150
	165
Arg Phe Asn Leu Ile Leu Ala Asp Thr Asn Ser Asp Arg Leu Phe Thr	170
	180
Val Asn Asp Val Thr Val Gly Gly Ser Lys Tyr Gly Ile Ile Asn Leu	185
	195
Gln Ser Leu Lys Thr Pro Thr Leu Lys Val Phe Met His Glu Asn Leu	200
	210
Tyr Phe Thr Asn Arg Lys Val Asn Ser Val Cys Trp Ala Ser Leu Asn	215
	225
His Leu Asp Ser His Ile Leu Leu Cys Leu Met Gly Leu Ala Glu Thr	230
	245
Pro Gly Cys Ala Thr Leu Leu Pro Ala Ser Leu Phe Val Asn Ser His	250
	260
Pro Ala Gly Ile Asp Arg Pro Gly Met Leu Cys Ser Phe Arg Ile Pro	265
	275
Gly Ala Trp Ser Cys Ala Trp Ser Leu Asn Ile Gln Ala Asn Asn Cys	280
	290
Phe Ser Thr Gly Leu Ser Arg Arg Val Leu Leu Thr Asn Val Val Thr	295
	300

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305          310          315          320
Gly His Arg Gln Ser Phe Gly Thr Asn Ser Asp Val Leu Ala Gln Gln
          325          330          335
Phe Ala Leu Met Ala Pro Leu Leu Phe Asn Gly Cys Arg Ser Gly Glu
          340          345          350
Ile Phe Ala Ile Asp Leu Arg Cys Gly Asn Gln Gly Lys Gly Trp Lys
          355          360          365
Ala Thr Arg Leu Phe His Asp Ser Ala Val Thr Ser Val Arg Ile Leu
          370          375          380
Gln Asp Glu Gln Tyr Leu Met Ala Ser Asp Met Ala Gly Lys Ile Lys
          385          390          395          400
Leu Trp Asp Leu Arg Thr Thr Lys Cys Val Arg Gln Tyr Glu Gly His
          405          410          415
Val Asn Glu Tyr Ala Tyr Leu Pro Leu His Val His Glu Glu Gly
          420          425          430
Ile Leu Val Ala Val Gly Gln Asp Cys Tyr Thr Arg Ile Trp Ser Leu
          435          440          445
His Asp Ala Arg Leu Leu Arg Thr Ile Pro Ser Pro Tyr Pro Ala Ser
          450          455          460
Lys Ala Asp Ile Pro Ser Val Ala Phe Ser Ser Arg Leu Gly Gly Ser
          465          470          475          480
Arg Gly Ala Pro Gly Leu Leu Met Ala Val Gly Gln Asp Leu Tyr Cys
          485          490          495
Tyr Ser Tyr Ser
          500

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<210> 3451
<211> 2007
<212> PRT
<213> Homo sapiens

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<400> 3451
Leu Leu Ser Ala Met Leu Ser His Gly Ala Gly Leu Ala Leu Trp Ile
 1          5          10          15
Thr Leu Ser Leu Leu Gln Thr Gly Leu Ala Glu Pro Glu Arg Cys Asn
          20          25          30
Phe Thr Leu Ala Glu Ser Lys Ala Ser Ser His Ser Val Ser Ile Gln
          35          40          45
Trp Arg Ile Leu Gly Ser Pro Cys Asn Phe Ser Leu Ile Tyr Ser Ser
          50          55          60
Asp Thr Leu Gly Ala Ala Leu Cys Pro Thr Phe Arg Ile Asp Asn Thr
          65          70          75          80
Thr Tyr Gly Cys Asn Leu Gln Asp Leu Gln Ala Gly Thr Ile Tyr Asn
          85          90          95
Phe Lys Ile Ile Ser Leu Asp Glu Glu Arg Thr Val Val Leu Gln Thr
          100          105          110
Asp Pro Leu Pro Pro Ala Arg Phe Gly Val Ser Lys Glu Lys Thr Thr
          115          120          125
Ser Thr Gly Leu His Val Trp Trp Thr Pro Ser Ser Gly Lys Val Thr
          130          135          140
Ser Tyr Glu Val Gln Leu Phe Asp Glu Asn Asn Gln Lys Ile Gln Gly
          145          150          155          160
Val Gln Ile Gln Glu Ser Thr Ser Trp Asn Glu Tyr Thr Phe Phe Asn
          165          170          175
Leu Thr Ala Gly Ser Lys Tyr Asn Ile Ala Ile Thr Ala Val Ser Gly
          180          185          190
Gly Lys Arg Ser Phe Ser Val Tyr Thr Asn Gly Ser Thr Val Pro Ser
          195          200          205
Pro Val Lys Asp Ile Gly Ile Ser Thr Lys Ala Asn Ser Leu Leu Ile
          210          215          220
Ser Trp Ser His Gly Ser Gly Asn Val Glu Arg Tyr Arg Leu Met Leu

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225		230		235		240
Met Asp Lys Gly Ile	Leu Val His Gly Gly	Val Val Asp Lys His	Ala			
	245		250			255
Thr Ser Tyr Ala Phe	His Gly Leu Ser Pro	Gly Tyr Leu Tyr Asn	Leu			
	260		265			270
Thr Val Met Thr Glu	Ala Ala Gly Leu Gln	Asn Tyr Arg Trp Lys	Leu			
	275		280			285
Val Arg Thr Ala Pro	Met Glu Val Ser Asn	Leu Lys Val Thr Asn	Asp			
	290		295			300
Gly Ser Leu Thr Ser	Leu Lys Val Lys Trp	Gln Arg Pro Pro Gly	Asn			
	305		310			315
Val Asp Ser Tyr Asn	Ile Thr Leu Ser His	Lys Gly Thr Ile Lys	Glu			
	325		330			335
Ser Arg Val Leu Ala	Pro Trp Ile Thr Glu	Thr His Phe Lys Glu	Leu			
	340		345			350
Val Pro Gly Arg Leu	Tyr Gln Val Thr Cys	Ser Ala Val Ser Leu	Gly			
	355		360			365
Glu Leu Ser Ala Gln	Lys Met Ala Val Gly	Arg Thr Phe Pro Asp	Lys			
	370		375			380
Val Ala Asn Leu Glu	Ala Asn Asn Asn Gly	Arg Met Arg Ser Leu	Val			
	385		390			395
Val Ser Trp Ser Pro	Pro Ala Gly Asp Trp	Glu Gln Tyr Arg Ile	Leu			
	405		410			415
Leu Phe Asn Asp Ser	Val Val Leu Leu Asn	Ile Thr Val Gly Lys	Glu			
	420		425			430
Glu Thr Gln Tyr Val	Met Asp Gly Thr Gly	Leu Val Pro Gly Arg	Gln			
	435		440			445
Tyr Glu Val Glu Val	Ile Val Glu Ser Gly	Asn Leu Lys Asn Ser	Glu			
	450		455			460
Arg Cys Gln Gly Arg	Thr Val Pro Leu Ala	Val Leu Gln Leu Arg	Val			
	465		470			475
Lys His Ala Asn Glu	Thr Ser Leu Ser Ile	Met Trp Gln Thr Pro	Val			
	485		490			495
Ala Glu Trp Glu Lys	Tyr Ile Ile Ser Leu	Ala Asp Arg Asp Leu	Leu			
	500		505			510
Leu Ile His Lys Ser	Leu Ser Lys Asp Ala	Lys Glu Phe Thr Phe	Thr			
	515		520			525
Asp Leu Val Pro Gly	Arg Lys Tyr Met Ala	Thr Val Thr Ser Ile	Ser			
	530		535			540
Gly Asp Leu Lys Asn	Ser Ser Ser Val Lys	Gly Arg Thr Val Pro	Ala			
	545		550			555
Gln Val Thr Asp Leu	His Val Ala Asn Gln	Gly Met Thr Ser Ser	Leu			
	565		570			575
Phe Thr Asn Trp Thr	Gln Ala Gln Gly Asp	Val Glu Phe Tyr Gln	Val			
	580		585			590
Leu Leu Ile His Glu	Asn Val Val Ile Lys	Asn Glu Ser Ile Ser	Ser			
	595		600			605
Glu Thr Ser Arg Tyr	Ser Phe His Ser Leu	Lys Ser Gly Ser Leu	Tyr			
	610		615			620
Ser Val Val Val Thr	Thr Val Ser Gly Gly	Ile Ser Ser Arg Gln	Val			
	625		630			635
Val Val Glu Gly Arg	Thr Val Pro Ser Ser	Val Ser Gly Val Thr	Val			
	645		650			655
Asn Asn Ser Gly Arg	Asn Asp Tyr Leu Ser	Val Ser Trp Leu Leu	Ala			
	660		665			670
Pro Gly Asp Val Asp	Asn Tyr Glu Val Thr	Leu Ser His Asp Gly	Lys			
	675		680			685
Val Val Gln Ser Leu	Val Ile Ala Lys Ser	Val Arg Glu Cys Ser	Phe			
	690		695			700
Ser Ser Leu Thr Pro	Gly Arg Leu Tyr Thr	Val Thr Ile Thr Thr	Arg			
	705		710			715
Ser Gly Lys Tyr Glu	Asn His Ser Phe Ser	Gln Glu Arg Thr Val	Pro			
	725		730			735
Asp Lys Val Gln Gly	Val Ser Val Ser Asn	Ser Ala Arg Ser Asp	Tyr			

5151

1250	1255	1260
Ala Pro Ser Pro Pro Ser	Leu Met Ser Phe Ala Asp	Ile Ala Asn Thr
1265	1270	1275
Ser Leu Ala Ile Thr Trp	Lys Gly Pro Pro Asp Trp	Thr Asp Tyr Asn
1285	1290	1295
Asp Phe Glu Leu Gln Trp	Leu Pro Arg Asp Ala Leu	Thr Val Phe Asn
1300	1305	1310
Pro Tyr Asn Asn Arg Lys	Ser Glu Gly Arg Ile Val	Tyr Gly Leu Arg
1315	1320	1325
Pro Gly Arg Ser Tyr Gln	Phe Asn Val Lys Thr Val	Ser Gly Asp Ser
1330	1335	1340
Trp Lys Thr Tyr Ser Lys	Pro Ile Phe Gly Ser Val	Arg Thr Lys Pro
1345	1350	1355
Asp Lys Ile Gln Asn Leu	His Cys Arg Pro Gln Asn	Ser Thr Ala Ile
1365	1370	1375
Ala Cys Ser Trp Ile Pro	Pro Asp Ser Asp Phe Asp	Gly Tyr Ser Ile
1380	1385	1390
Glu Cys Arg Lys Met Asp	Thr Gln Glu Val Glu Phe	Ser Arg Lys Leu
1395	1400	1405
Glu Lys Glu Lys Ser Leu	Leu Asn Ile Met Met Leu	Val Pro His Lys
1410	1415	1420
Arg Tyr Leu Val Ser Ile	Lys Val Gln Ser Ala Gly	Met Thr Ser Glu
1425	1430	1435
Val Val Glu Asp Ser Thr	Ile Thr Met Ile Asp Arg	Pro Pro Pro Pro
1445	1450	1455
Pro Pro His Ile Arg Val	Asn Glu Lys Asp Val Leu	Ile Ser Lys Ser
1460	1465	1470
Ser Ile Asn Phe Thr Val	Asn Cys Ser Trp Phe Ser	Asp Thr Asn Gly
1475	1480	1485
Ala Val Lys Tyr Phe Thr	Val Val Val Arg Glu Ala	Asp Gly Ser Asp
1490	1495	1500
Glu Leu Lys Pro Glu Gln	Gln His Pro Leu Pro Ser	Tyr Leu Glu Tyr
1505	1510	1515
Arg His Asn Ala Ser Ile	Arg Val Tyr Gln Thr Asn	Tyr Phe Ala Ser
1525	1530	1535
Lys Cys Ala Glu Asn Pro	Asn Ser Asn Ser Lys Ser	Phe Asn Ile Lys
1540	1545	1550
Leu Gly Ala Glu Met Glu	Ser Leu Gly Gly Lys Cys	Asp Pro Thr Gln
1555	1560	1565
Gln Lys Phe Cys Asp Gly	Pro Leu Lys Pro His Thr	Ala Tyr Arg Ile
1570	1575	1580
Ser Ile Arg Ala Phe Thr	Gln Leu Phe Asp Glu Asp	Leu Lys Glu Phe
1585	1590	1595
Thr Lys Pro Leu Tyr Ser	Asp Thr Phe Phe Ser Leu	Pro Ile Thr Thr
1605	1610	1615
Glu Ser Glu Pro Leu Phe	Gly Ala Ile Glu Gly Val	Ser Ala Gly Leu
1620	1625	1630
Phe Leu Ile Gly Met Leu	Val Ala Val Val Ala Leu	Leu Ile Cys Arg
1635	1640	1645
Gln Lys Val Ser His Gly	Arg Glu Arg Pro Ser Ala	Arg Leu Ser Ile
1650	1655	1660
Arg Arg Asp Arg Pro Leu	Ser Val His Leu Asn Leu	Gly Gln Lys Gly
1665	1670	1675
Asn Arg Lys Thr Ser Cys	Pro Ile Lys Ile Asn Gln	Phe Glu Gly His
1685	1690	1695
Phe Met Lys Leu Gln Ala	Asp Ser Asn Tyr Leu Leu	Ser Lys Glu Tyr
1700	1705	1710
Glu Glu Leu Lys Asp Val	Gly Arg Asn Gln Ser Cys	Asp Ile Ala Leu
1715	1720	1725
Leu Pro Glu Asn Arg Gly	Lys Asn Arg Tyr Asn Asn	Ile Leu Pro Tyr
1730	1735	1740
Asp Ala Thr Arg Val Lys	Leu Ser Asn Val Asp Asp	Pro Cys Ser
1745	1750	1755
Asp Tyr Ile Asn Ala Ser	Tyr Ile Pro Gly Asn Asn	Phe Arg Arg Glu

1765 1770 1775
 Tyr Ile Val Thr Gln Gly Pro Leu Pro Gly Thr Lys Asp Asp Phe Trp
 1780 1785 1790
 Lys Met Val Trp Glu Gln Asn Val His Asn Ile Val Met Val Thr Gln
 1795 1800 1805
 Cys Val Glu Lys Gly Arg Val Lys Cys Asp His Tyr Trp Pro Ala Asp
 1810 1815 1820
 Gln Asp Ser Leu Tyr Tyr Gly Asp Leu Ile Leu Gln Met Leu Ser Glu
 1825 1830 1835 1840
 Ser Val Leu Pro Glu Trp Thr Ile Arg Glu Phe Lys Ile Cys Gly Glu
 1845 1850 1855
 Glu Gln Leu Asp Ala His Arg Leu Ile Arg His Phe His Tyr Thr Val
 1860 1865 1870
 Trp Pro Asp His Gly Val Pro Glu Thr Thr Gln Ser Leu Ile Gln Phe
 1875 1880 1885
 Val Arg Thr Val Arg Asp Tyr Ile Asn Arg Ser Pro Gly Ala Gly Pro
 1890 1895 1900
 Thr Val Val His Cys Ser Ala Gly Val Gly Arg Thr Gly Thr Phe Ile
 1905 1910 1915 1920
 Ala Leu Asp Arg Ile Leu Gln Gln Leu Asp Ser Lys Asp Ser Val Asp
 1925 1930 1935
 Ile Tyr Gly Ala Val His Asp Leu Arg Leu His Arg Val His Met Val
 1940 1945 1950
 Gln Thr Glu Cys Gln Tyr Val Tyr Leu His Gln Cys Val Arg Asp Val
 1955 1960 1965
 Leu Arg Ala Arg Lys Leu Arg Ser Glu Gln Glu Asn Pro Leu Phe Pro
 1970 1975 1980
 Ile Tyr Glu Asn Val Asn Pro Glu Tyr His Arg Asp Pro Val Tyr Ser
 1985 1990 1995 2000
 Arg His
 2002

<210> 3452
 <211> 339
 <212> PRT
 <213> Homo sapiens

<400> 3452
 Phe Phe Arg Ser Ser Asp Asn Gly Ser Pro Ile Arg Gln Tyr Glu
 1 5 10 15
 His Ser Thr Pro Ala His Gln Gly Pro Val Met Gly Leu Glu Gly Lys
 20 25 30
 Ser Ala Arg Asn Ser Gln Leu Arg Ile Val Leu Val Gly Lys Thr Gly
 35 40 45
 Ala Gly Lys Ser Ala Thr Gly Asn Ser Ile Leu Gly Arg Lys Val Phe
 50 55 60
 His Ser Gly Thr Ala Ala Lys Ser Ile Thr Lys Lys Cys Glu Lys Arg
 65 70 75 80
 Ser Ser Ser Trp Lys Glu Thr Glu Leu Val Val Val Asp Thr Pro Gly
 85 90 95
 Ile Phe Asp Thr Glu Val Pro Asn Ala Glu Thr Ser Lys Glu Ile Ile
 100 105 110
 Arg Cys Ile Leu Leu Thr Ser Pro Gly Pro His Ala Leu Leu Val
 115 120 125
 Val Pro Leu Gly Arg Tyr Thr Glu Glu Glu His Lys Ala Thr Glu Lys
 130 135 140
 Ile Leu Lys Met Phe Gly Glu Arg Ala Arg Ser Phe Met Ile Leu Ile
 145 150 155 160
 Phe Thr Arg Lys Asp Asp Leu Gly Asp Thr Asn Leu His Asp Tyr Leu
 165 170 175
 Arg Glu Ala Pro Glu Asp Ile Gln Asp Leu Met Asp Ile Phe Gly Asp

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<210> 3453
<211> 721
<212> PRT
<213> Homo sapiens
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5154


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<210> 3454
<211> 535
<212> PRT
<213> Homo sapiens
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<400> 3454

Glu	Arg	Tyr	Leu	Phe	Ala	Thr	Tyr	Val	Ala	Pro	Ser	Ala	Thr	Leu	Asp
1				5					10					15	
Ile	Gly	Leu	Gln	Gln	Glu	Lys	Lys	Lys	Glu	Ile	Tyr	Met	Lys	Ile	Gln
			20					25					30		
Pro	Pro	Phe	Glu	Asp	Leu	Phe	Asp	Thr	Ala	Glu	Glu	Tyr	Ile	Leu	Leu
		35					40					45			
Leu	Leu	Leu	Glu	Pro	Trp	Thr	Lys	Met	Val	Lys	Ser	Asp	Gln	Ile	Ala
		50				55					60				
Tyr	Lys	Lys	Val	Glu	Leu	Val	Glu	Glu	Thr	Arg	Gln	Leu	Asp	Ser	Thr
		65			70					75					80
Tyr	Phe	Arg	Lys	Leu	Gln	Ala	Leu	His	Lys	Glu	Thr	Phe	Ser	Lys	Lys
			85						90					95	
Ala	Glu	Asp	Thr	Thr	Cys	Glu	Ile	Gly	Thr	Gly	Ile	Leu	Ser	Leu	Ser
			100					105				110			
Asn	Val	Ser	Lys	Arg	Thr	Glu	Tyr	Trp	Asp	Asn	Val	Pro	Ala	Glu	Tyr
		115					120					125			
Lys	His	Phe	Lys	Phe	Ser	Asp	Leu	Leu	Asn	Asn	Lys	Leu	Glu	Phe	Glu
		130					135				140				
His	Phe	Arg	Gln	Phe	Leu	Glu	Thr	His	Ser	Ser	Ser	Met	Asp	Leu	Met
145					150					155					160
Cys	Trp	Thr	Asp	Ile	Glu	Gln	Phe	Arg	Arg	Ile	Thr	Tyr	Arg	Asp	Arg
			165						170					175	
Asn	Gln	Arg	Lys	Ala	Lys	Ser	Ile	Tyr	Ile	Lys	Asn	Lys	Tyr	Leu	Asn
			180					185					190		
Lys	Lys	Tyr	Phe	Phe	Gly	Pro	Asn	Ser	Pro	Ala	Ser	Leu	Tyr	Gln	Gln
		195					200					205			
Asn	Gln	Val	Met	His	Leu	Ser	Gly	Gly	Trp	Gly	Lys	Ile	Leu	His	Glu
		210					215				220				
Gln	Leu	Asp	Ala	Pro	Val	Leu	Val	Glu	Ile	Gln	Lys	His	Val	Gln	Asn
225					230					235					240
Arg	Leu	Glu	Asn	Val	Trp	Leu	Pro	Leu	Phe	Leu	Ala	Ser	Glu	Gln	Phe
			245						250					255	
Ala	Ala	Arg	Gln	Lys	Ile	Lys	Val	Gln	Met	Lys	Asp	Ile	Ala	Glu	Glu
			260					265					270		
Leu	Leu	Leu	Gln	Lys	Ala	Glu	Lys	Lys	Ile	Gly	Val	Trp	Lys	Pro	Val
		275					280				285				
Glu	Ser	Lys	Trp	Ile	Ser	Ser	Ser	Cys	Lys	Ile	Ile	Ala	Phe	Arg	Lys
		290					295				300				
Ala	Leu	Leu	Asn	Pro	Val	Thr	Ser	Arg	Gln	Phe	Gln	Arg	Phe	Val	Ala
305					310					315					320
Leu	Lys	Gly	Asp	Leu	Leu	Glu	Asn	Gly	Leu	Leu	Phe	Trp	Gln	Glu	Val
			325					330					335		
Gln	Lys	Tyr	Lys	Asp	Leu	Cys	His	Ser	His	Cys	Asp	Glu	Ser	Val	Ile
			340					345					350		
Gln	Lys	Lys	Ile	Thr	Thr	Ile	Ile	Asn	Cys	Phe	Ile	Asn	Ser	Ser	Ile
		355					360					365			
Pro	Pro	Ala	Leu	Gln	Ile	Asp	Ile	Pro	Val	Glu	Gln	Ala	Gln	Lys	Ile
		370				375					380				
Ile	Glu	His	Arg	Lys	Glu	Leu	Gly	Pro	Tyr	Val	Phe	Arg	Glu	Ala	Gln
385					390					395					400
Met	Thr	Phe	Leu	Gly	Val	Met	Phe	Lys	Phe	Trp	Pro	Gln	Phe	Cys	Glu
			405						410					415	
Phe	Arg	Lys	Asn	Leu	Thr	Asp	Glu	Asn	Ile	Met	Ser	Val	Leu	Glu	Arg
		420					425						430		
Arg	Gln	Glu	Tyr	Asn	Lys	Gln	Lys	Lys	Lys	Leu	Ala	Val	Leu	Gln	Asn
		435				440						445			
Asp	Glu	Lys	Ser	Gly	Lys	Asp	Gly	Ile	Lys	Gln	Tyr	Ala	Asn	Thr	Ser
		450				455					460				
Val	Pro	Ala	Ile	Lys	Thr	Ala	Leu	Leu	Ser	Asp	Ser	Phe	Leu	Gly	Leu
465					470					475					480
Gln	Pro	Tyr	Gly	Arg	Gln	Pro	Thr	Trp	Cys	Tyr	Ser	Lys	Tyr	Ile	Glu

				485					490					495	
Ala	Leu	Glu	Gln	Glu	Arg	Ile	Leu	Leu	Lys	Ile	Gln	Glu	Glu	Leu	Glu
			500						505					510	
Lys	Ser	Cys	Leu	Gln	Ala	Cys	Asn	Leu	Ser	Gln	Ile	Leu	Arg	Leu	Ala
		515					520						525		
Leu	Gln	Leu	Cys	Leu											
	530			533											

<210> 3455
 <211> 1035
 <212> PRT
 <213> Homo sapiens

<400> 3455

Ala	Pro	Thr	Ala	Gln	Ala	Met	Met	Ser	Phe	Gly	Gly	Ala	Asp	Ala	Leu
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Leu	Gly	Ala	Pro	Phe	Ala	Pro	Leu	His	Gly	Gly	Gly	Ser	Leu	His	Tyr
			20					25					30		
Ala	Leu	Ala	Arg	Lys	Gly	Gly	Ala	Gly	Gly	Thr	Arg	Ser	Ala	Ala	Gly
		35					40					45			
Ser	Ser	Ser	Gly	Phe	His	Ser	Trp	Thr	Arg	Thr	Ser	Val	Ser	Ser	Val
	50					55					60				
Ser	Ala	Ser	Pro	Ser	Arg	Phe	Arg	Gly	Ala	Gly	Ala	Ala	Ser	Ser	Thr
	65				70					75					80
Asp	Ser	Leu	Asp	Thr	Leu	Ser	Asn	Gly	Pro	Glu	Gly	Cys	Met	Val	Ala
				85					90					95	
Val	Ala	Thr	Ser	Arg	Ser	Glu	Lys	Glu	Gln	Leu	Gln	Ala	Leu	Asn	Asp
			100					105					110		
Arg	Phe	Ala	Gly	Tyr	Ile	Asp	Lys	Val	Arg	Gln	Leu	Glu	Ala	His	Asn
	115						120					125			
Arg	Ser	Leu	Glu	Gly	Glu	Ala	Ala	Leu	Arg	Gln	Gln	Gln	Ala	Gly	
	130					135					140				
Arg	Ser	Ala	Met	Gly	Glu	Leu	Tyr	Glu	Arg	Glu	Val	Arg	Glu	Met	Arg
	145				150					155					160
Gly	Ala	Val	Leu	Arg	Leu	Gly	Ala	Ala	Arg	Gly	Gln	Leu	Arg	Leu	Glu
			165					170						175	
Gln	Glu	His	Leu	Glu	Asp	Ile	Ala	His	Val	Arg	Gln	Arg	Leu	Asp	
			180					185					190		
Asp	Glu	Ala	Arg	Gln	Arg	Glu	Glu	Ala	Glu	Ala	Ala	Ala	Arg	Ala	Leu
	195						200				205				
Ala	Arg	Phe	Ala	Gln	Glu	Ala	Glu	Ala	Ala	Arg	Val	Asp	Leu	Gln	Lys
	210					215					220				
Lys	Ala	Gln	Ala	Leu	Gln	Glu	Glu	Cys	Gly	Tyr	Leu	Arg	Arg	His	His
	225				230					235					240
Gln	Glu	Glu	Val	Gly	Glu	Leu	Leu	Gly	Gln	Ile	Gln	Gly	Ser	Gly	Ala
			245					250						255	
Ala	Gln	Ala	Gln	Met	Gln	Ala	Glu	Thr	Arg	Asp	Ala	Leu	Lys	Cys	Asp
			260					265					270		
Val	Thr	Ser	Ala	Leu	Arg	Glu	Ile	Arg	Ala	Gln	Leu	Glu	Gly	His	Ala
	275						280					285			
Val	Gln	Ser	Thr	Leu	Gln	Ser	Glu	Glu	Trp	Phe	Arg	Val	Arg	Leu	Asp
	290					295					300				
Arg	Leu	Ser	Glu	Ala	Ala	Lys	Val	Asn	Thr	Asp	Ala	Met	Arg	Ser	Ala
	305				310					315					320
Gln	Glu	Glu	Ile	Thr	Glu	Tyr	Arg	Arg	Gln	Leu	Gln	Ala	Arg	Thr	Thr
			325						330					335	
Glu	Leu	Glu	Ala	Leu	Lys	Ser	Thr	Lys	Asp	Ser	Leu	Glu	Arg	Gln	Arg
			340					345					350		
Ser	Glu	Leu	Glu	Asp	Arg	His	Gln	Ala	Asp	Ile	Ala	Ser	Tyr	Gln	Glu
		355					360						365		
Ala	Ile	Gln	Gln	Leu	Asp	Ala	Glu	Leu	Arg	Asn	Thr	Lys	Trp	Glu	Met

370	375	380
Ala Ala Gln Leu Arg Glu Tyr Gln Asp Leu Leu Asn Val Lys Met Ala		
385	390	395
Leu Asp Ile Glu Ile Ala Ala Tyr Arg Lys Leu Leu Glu Gly Glu Glu		400
	405	410
Cys Arg Ile Gly Phe Gly Pro Ile Pro Phe Ser Leu Pro Glu Gly Leu		415
	420	425
Pro Lys Ile Pro Ser Val Ser Thr His Ile Lys Val Lys Ser Glu Glu		430
	435	440
Lys Ile Lys Val Val Glu Lys Ser Glu Lys Glu Thr Val Ile Val Glu		445
	450	455
Glu Gln Thr Glu Glu Thr Gln Val Thr Glu Glu Val Thr Glu Glu Glu		460
465	470	475
Asp Lys Glu Ala Lys Glu Glu Glu Gly Lys Glu Glu Glu Gly Gly Glu		480
	485	490
Glu Glu Glu Ala Glu Gly Gly Glu Glu Glu Thr Lys Ser Pro Pro Ala		495
	500	505
Glu Glu Ala Ala Ser Pro Glu Lys Glu Ala Lys Ser Pro Val Lys Glu		510
	515	520
Glu Ala Lys Ser Pro Ala Glu Ala Lys Ser Pro Glu Lys Glu Glu Ala		525
530	535	540
Lys Ser Pro Ala Glu Val Lys Ser Pro Glu Lys Ala Lys Ser Pro Ala		
545	550	555
Lys Glu Glu Ala Lys Ser Pro Pro Glu Ala Lys Ser Pro Glu Lys Asp		560
	565	570
Gly Lys Gln Asn Phe Gln Ala Glu Val Lys Ser Pro Glu Lys Ala Lys		575
	580	585
Ser Pro Ala Lys Glu Glu Ala Lys Ser Pro Ala Glu Ala Lys Ser Pro		590
	595	600
Glu Lys Ala Lys Ser Pro Val Lys Glu Glu Ala Lys Ser Pro Ala Glu		605
610	615	620
Ala Lys Ser Pro Val Lys Glu Glu Ala Lys Ser Pro Ala Glu Val Lys		
625	630	635
Ser Pro Glu Lys Ala Lys Ser Pro Thr Lys Glu Glu Ala Lys Ser Pro		640
	645	650
Glu Lys Ala Lys Ser Pro Glu Lys Ala Lys Ser Pro Glu Lys Glu Glu		655
	660	665
Ala Lys Ser Pro Glu Lys Ala Lys Ser Pro Val Lys Ala Glu Ala Lys		670
	675	680
Ser Pro Glu Lys Ala Lys Ser Pro Val Lys Ala Glu Ala Lys Ser Pro		685
690	695	700
Glu Lys Ala Lys Ser Pro Val Lys Glu Glu Ala Lys Ser Pro Glu Lys		
705	710	715
Ala Lys Ser Pro Val Lys Glu Glu Ala Lys Ser Pro Glu Lys Ala Lys		720
	725	730
Ser Pro Val Lys Glu Glu Ala Lys Thr Pro Glu Lys Ala Lys Ser Pro		735
	740	745
Val Lys Glu Glu Ala Lys Ser Pro Glu Lys Ala Lys Ser Pro Glu Lys		750
	755	760
Ala Lys Thr Leu Asp Val Lys Ser Pro Glu Ala Lys Thr Pro Ala Lys		765
770	775	780
Glu Glu Ala Arg Ser Pro Ala Asp Lys Phe Pro Glu Lys Ala Lys Ser		
785	790	795
Pro Val Lys Glu Glu Val Lys Ser Pro Glu Lys Ala Lys Ser Pro Leu		800
	805	810
Lys Glu Asp Ala Lys Ala Pro Glu Lys Glu Ile Pro Lys Lys Glu Glu		815
	820	825
Val Lys Ser Pro Val Lys Glu Glu Glu Lys Pro Gln Glu Val Lys Val		830
	835	840
Lys Glu Pro Pro Lys Lys Ala Glu Glu Glu Lys Ala Pro Ala Thr Pro		845
	850	855
Lys Thr Glu Glu Lys Lys Asp Ser Lys Lys Glu Glu Ala Pro Lys Lys		860
865	870	875
Glu Ala Pro Lys Pro Lys Val Glu Glu Lys Lys Glu Pro Ala Val Glu		880

885 890 895
 Lys Pro Lys Glu Ser Lys Val Glu Ala Lys Lys Glu Glu Ala Glu Asp
 900 905 910
 Lys Lys Lys Val Pro Thr Pro Glu Lys Glu Ala Pro Ala Lys Val Glu
 915 920 925
 Val Lys Glu Asp Ala Lys Pro Lys Glu Lys Thr Glu Val Ala Lys Lys
 930 935 940
 Glu Pro Asp Asp Ala Lys Ala Lys Glu Pro Ser Lys Pro Ala Glu Lys
 945 950 955 960
 Lys Glu Ala Ala Pro Glu Lys Lys Asp Thr Lys Glu Glu Lys Ala Lys
 965 970 975
 Lys Pro Glu Glu Lys Pro Lys Thr Glu Ala Lys Ala Lys Glu Asp Asp
 980 985 990
 Lys Thr Leu Ser Lys Glu Pro Ser Lys Pro Lys Ala Glu Lys Ala Glu
 995 1000 1005
 Lys Ser Ser Ser Thr Asp Gln Lys Asp Ser Lys Pro Pro Glu Lys Ala
 1010 1015 1020
 Thr Glu Asp Lys Ala Ala Lys Gly Lys
 1025 1030 1033

<210> 3456
 <211> 403
 <212> PRT
 <213> Homo sapiens

<400> 3456
 Tyr Leu Ser Phe Ile Pro Gly His Ala Ser Lys Ser Ala Pro Met Asn
 1 5 10 15
 Gly His Cys Phe Ala Glu Asn Gly Pro Ser Gln Lys Ser Ser Leu Pro
 20 25 30
 Pro Leu Leu Ile Pro Pro Ser Glu Asn Leu Gly Pro His Glu Glu Asp
 35 40 45
 Gln Val Val Cys Gly Phe Lys Lys Leu Thr Val Asn Gly Val Cys Ala
 50 55 60
 Ser Thr Pro Pro Leu Thr Pro Ile Lys Asn Ser Pro Ser Leu Phe Pro
 65 70 75 80
 Cys Ala Pro Leu Cys Glu Arg Gly Ser Arg Pro Leu Pro Pro Leu Pro
 85 90 95
 Ile Ser Glu Ala Leu Ser Leu Asp Asp Thr Asp Cys Glu Val Glu Phe
 100 105 110
 Leu Thr Ser Ser Asp Thr Asp Phe Leu Leu Glu Asp Ser Thr Leu Ser
 115 120 125
 Asp Phe Lys Tyr Asp Val Pro Gly Arg Arg Ser Phe Arg Gly Cys Gly
 130 135 140
 Gln Ile Asn Tyr Ala Tyr Phe Asp Thr Pro Ala Val Ser Ala Ala Asp
 145 150 155 160
 Leu Ser Tyr Val Ser Asp Gln Asn Gly Gly Val Pro Asp Pro Asn Pro
 165 170 175
 Pro Pro Pro Gln Thr His Arg Arg Leu Arg Arg Ser His Ser Gly Pro
 180 185 190
 Ala Gly Ser Phe Asn Lys Pro Ala Ile Arg Ile Ser Asn Cys Cys Ile
 195 200 205
 His Arg Ala Ser Pro Asn Ser Asp Glu Asp Lys Pro Glu Val Pro Pro
 210 215 220
 Arg Val Pro Ile Pro Pro Arg Pro Val Lys Pro Asp Tyr Arg Arg Trp
 225 230 235 240
 Ser Ala Glu Val Thr Ser Ser Thr Tyr Ser Asp Glu Asp Arg Pro Pro
 245 250 255
 Lys Val Pro Pro Arg Glu Pro Leu Ser Pro Ser Asn Ser Arg Thr Pro
 260 265 270
 Ser Pro Lys Ser Leu Pro Ser Tyr Leu Asn Gly Val Met Pro Pro Thr

275	280	285
Gln Ser Phe Ala Pro Asp Pro Lys Tyr Val Ser Ser Lys Ala Leu Gln		
290	295	300
Arg Gln Asn Ser Glu Gly Ser Ala Ser Lys Val Pro Cys Ile Leu Pro		
305	310	315
Ile Ile Glu Asn Gly Lys Lys Val Ser Ser Thr His Tyr Tyr Leu Leu		
325	330	335
Pro Glu Arg Pro Pro Tyr Leu Asp Lys Tyr Glu Lys Phe Phe Arg Glu		
340	345	350
Ala Lys Lys Lys Asn Gly Gly Ala Gln Ile Gln Pro Leu Pro Ala Asp		
355	360	365
Cys Gly Ile Ser Ser Ala Thr Glu Lys Pro Asp Ser Lys Thr Lys Met		
370	375	380
Asp Leu Gly Gly His Val Lys Arg Lys His Leu Ser Tyr Val Gly Thr		
385	390	395
Pro		400
401		

<210> 3457
 <211> 1624
 <212> PRT
 <213> Homo sapiens

<400> 3457

Phe	Ile	Leu	Ser	Ser	Ser	Ser	Ser	Ala	Ser	Ser	Glu	His	Phe	His	His
1			5					10						15	
His	Tyr	Ser	Phe	Gly	Asn	Trp	Trp	Pro	Gly	Ser	Phe	Lys	Gly	His	Arg
		20						25					30		
Met	Ser	Leu	Pro	Phe	Tyr	Gln	Arg	Cys	His	Gln	His	Tyr	Asp	Leu	Ser
	35					40					45				
Tyr	Arg	Asn	Lys	Asp	Val	Arg	Ser	Thr	Val	Ser	His	Tyr	Gln	Arg	Glu
	50					55					60				
Lys	Lys	Arg	Ser	Ala	Val	Tyr	Thr	Gln	Gly	Ser	Thr	Ala	Tyr	Ser	Ser
	65			70						75					80
Arg	Ser	Ser	Ala	Ala	His	Arg	Arg	Glu	Ser	Glu	Ala	Phe	Arg	Arg	Ala
			85					90						95	
Ser	Ala	Ser	Ser	Ser	Gln	Gln	Gln	Ala	Ser	Gln	His	Ala	Leu	Ser	Ser
		100						105					110		
Glu	Val	Ser	Arg	Lys	Ala	Ala	Ser	Ala	Tyr	Asp	Tyr	Gly	Ser	Ser	His
	115					120						125			
Gly	Leu	Thr	Asp	Ser	Ser	Leu	Leu	Leu	Asp	Asp	Tyr	Ser	Ser	Lys	Leu
	130					135					140				
Ser	Pro	Lys	Pro	Lys	Arg	Ala	Lys	His	Ser	Leu	Leu	Ser	Gly	Glu	Glu
	145				150					155				160	
Lys	Glu	Asn	Leu	Pro	Ser	Asp	Tyr	Met	Val	Pro	Ile	Phe	Ser	Gly	Arg
			165					170						175	
Gln	Lys	His	Val	Ser	Gly	Ile	Thr	Asp	Thr	Glu	Glu	Glu	Arg	Ile	Lys
		180						185					190		
Glu	Ala	Ala	Ala	Tyr	Ile	Ala	Gln	Arg	Asn	Leu	Leu	Ala	Ser	Glu	Glu
	195					200						205			
Gly	Ile	Thr	Thr	Pro	Lys	Gln	Ser	Thr	Ala	Ser	Lys	Gln	Thr	Thr	Ala
	210				215						220				
Ser	Lys	Gln	Ser	Thr	Ala	Ser	Lys	Gln	Ser	Thr	Ala	Ser	Lys	Gln	Ser
	225				230					235				240	
Thr	Ala	Ser	Arg	Gln	Ser	Thr	Ala	Ser	Arg	Gln	Ser	Val	Val	Ser	Lys
			245					250						255	
Gln	Ala	Thr	Ser	Ala	Leu	Gln	Gln	Glu	Glu	Thr	Ser	Glu	Lys	Lys	Ser
		260						265					270		
Arg	Lys	Val	Val	Ile	Arg	Gly	Lys	Ala	Glu	Arg	Leu	Ser	Leu	Arg	Lys
		275					280					285			
Thr	Leu	Glu	Glu	Thr	Glu	Thr	Tyr	His	Ala	Lys	Leu	Asn	Glu	Asp	His

290	295	300
Leu Leu His Ala Pro Glu Phe Ile Ile Lys Pro Arg Ser His Thr Val		
305	310	315
Trp Glu Lys Glu Asn Val Lys Leu His Cys Ser Ile Ala Gly Trp Pro		320
	325	330
Glu Pro Arg Val Thr Trp Tyr Lys Asn Gln Val Pro Ile Asn Val His		335
	340	345
Ala Asn Pro Gly Lys Tyr Ile Ile Glu Ser Arg Tyr Gly Met His Thr		350
	355	360
Leu Glu Ile Asn Ala Cys Asp Phe Glu Asp Thr Ala Gln Tyr Arg Ala		365
	370	375
Ser Ala Met Asn Val Lys Gly Glu Leu Ser Ala Tyr Ala Ser Val Val		380
385	390	395
Val Lys Arg Tyr Lys Gly Glu Phe Asp Glu Thr Arg Phe His Ala Gly		400
	405	410
Ala Ser Thr Met Pro Leu Ser Phe Gly Val Thr Pro Tyr Gly Tyr Ala		415
	420	425
Ser Arg Phe Glu Ile His Phe Asp Asp Lys Phe Asp Val Ser Phe Gly		430
	435	440
Arg Glu Gly Glu Thr Met Ser Leu Gly Cys Arg Val Val Ile Thr Pro		445
	450	455
Glu Ile Lys His Phe Gln Pro Glu Ile Gln Trp Tyr Arg Asn Gly Val		460
465	470	475
Pro Leu Ser Pro Ser Lys Trp Val Gln Thr Leu Trp Ser Gly Glu Arg		480
	485	490
Ala Thr Leu Thr Phe Ser His Leu Asn Lys Glu Asp Glu Gly Leu Tyr		495
	500	505
Thr Ile Arg Val Arg Met Gly Glu Tyr Tyr Glu Gln Tyr Ser Ala Tyr		510
	515	520
Val Phe Val Arg Asp Ala Asp Ala Glu Ile Glu Gly Ala Pro Ala Ala		525
	530	535
Pro Leu Asp Val Lys Cys Leu Glu Ala Asn Lys Asp Tyr Ile Ile Ile		540
545	550	555
Ser Trp Lys Gln Pro Ala Val Asp Gly Gly Ser Pro Ile Leu Gly Tyr		560
	565	570
Phe Ile Asp Lys Cys Glu Val Gly Thr Asp Ser Trp Ser Gln Cys Asn		575
	580	585
Asp Thr Pro Val Lys Phe Ala Arg Phe Pro Val Thr Gly Leu Ile Glu		590
	595	600
Gly Arg Ser Tyr Ile Phe Arg Val Arg Ala Val Asn Lys Met Gly Ile		605
	610	615
Gly Phe Pro Ser Arg Val Ser Glu Pro Val Ala Ala Leu Asp Pro Ala		620
625	630	635
Glu Lys Ala Arg Leu Lys Ser Pro Pro Leu Ser Thr Leu Asp Trp Thr		640
	645	650
Val Ile Val Thr Glu Glu Glu Pro Ser Glu Gly Ile Val Pro Gly Pro		655
	660	665
Pro Thr Asp Leu Ser Val Thr Glu Ala Thr Arg Ser Tyr Val Val Leu		670
	675	680
Ser Trp Lys Pro Pro Gly Gln Arg Gly His Glu Gly Ile Met Tyr Phe		685
	690	695
Val Glu Lys Cys Glu Ala Gly Thr Glu Asn Trp Gln Arg Val Asn Thr		700
705	710	715
Glu Leu Pro Val Lys Ser Pro Arg Phe Ala Leu Phe Asp Leu Ala Glu		720
	725	730
Gly Lys Ser Tyr Cys Phe Arg Val Arg Cys Ser Asn Ser Ala Gly Val		735
	740	745
Gly Glu Pro Ser Glu Ala Thr Glu Val Thr Val Val Gly Asp Lys Leu		750
	755	760
Asp Ile Pro Lys Ala Pro Gly Lys Ile Ile Pro Ser Arg Asn Thr Asp		765
	770	775
Thr Ser Val Val Val Ser Trp Glu Glu Ser Lys Asp Ala Lys Glu Leu		780
785	790	795
Val Gly Tyr Tyr Ile Glu Ala Asn Val Ala Gly Ser Gly Lys Trp Glu		800

5162

1315 1320 1325
 Lys Asp Glu Arg Glu Ile Ser Val Asp Glu Lys His Asp Phe Lys Asp
 1330 1335 1340
 Gly Ile Cys Thr Leu Leu Ile Thr Glu Phe Ser Lys Lys Asp Ala Gly
 1345 1350 1355 1360
 Ile Tyr Glu Val Ile Leu Lys Asp Asp Arg Gly Lys Asp Lys Ser Arg
 1365 1370 1375
 Leu Lys Leu Val Asp Glu Ala Phe Lys Glu Leu Met Met Glu Val Cys
 1380 1385 1390
 Lys Lys Ile Ala Leu Ser Ala Thr Asp Leu Lys Ile Gln Ser Thr Ala
 1395 1400 1405
 Glu Gly Ile Gln Leu Tyr Ser Phe Val Thr Tyr Tyr Val Glu Asp Leu
 1410 1415 1420
 Lys Val Asn Trp Ser His Asn Gly Ser Ala Ile Arg Tyr Ser Asp Arg
 1425 1430 1435 1440
 Val Lys Thr Gly Val Thr Gly Glu Gln Ile Trp Leu Gln Ile Asn Glu
 1445 1450 1455
 Pro Thr Pro Asn Asp Lys Gly Lys Tyr Val Met Glu Leu Phe Asp Gly
 1460 1465 1470
 Lys Thr Gly His Gln Lys Thr Val Asp Leu Ser Gly Gln Ala Tyr Asp
 1475 1480 1485
 Glu Ala Tyr Ala Glu Phe Gln Arg Leu Lys Gln Ala Ala Ile Ala Glu
 1490 1495 1500
 Lys Asn Arg Ala Arg Val Leu Gly Gly Leu Pro Asp Val Val Thr Ile
 1505 1510 1515 1520
 Gln Glu Gly Lys Ala Leu Asn Leu Thr Cys Asn Val Trp Gly Asp Pro
 1525 1530 1535
 Pro Pro Glu Val Ser Trp Leu Lys Asn Glu Lys Ala Leu Ala Ser Asp
 1540 1545 1550
 Asp His Cys Asn Leu Lys Phe Glu Ala Gly Arg Thr Ala Tyr Phe Thr
 1555 1560 1565
 Ile Asn Gly Val Ser Thr Ala Asp Ser Gly Lys Tyr Gly Leu Val Val
 1570 1575 1580
 Lys Asn Lys Tyr Gly Ser Glu Thr Ser Asp Phe Thr Val Ser Val Phe
 1585 1590 1595 1600
 Ile Pro Glu Glu Glu Ala Arg Met Ala Ala Leu Glu Ser Leu Lys Gly
 1605 1610 1615
 Gly Lys Lys Ala Lys
 16201621

<210> 3458
 <211> 1048
 <212> PRT
 <213> Homo sapiens

<400> 3458
 Leu Ser Arg Ser Ser Ser Asp Asn Asn Thr Asn Thr Leu Gly Arg Asn
 1 5 10 15
 Val Met Ser Thr Ala Thr Ser Pro Leu Met Gly Ala Gln Ser Phe Pro
 20 25 30
 Asn Leu Thr Thr Pro Gly Thr Thr Ser Thr Val Thr Met Ser Thr Ser
 35 40 45
 Ser Val Thr Ser Ser Ser Asn Val Ala Thr Ala Thr Val Leu Ser
 50 55 60
 Val Gly Gln Ser Leu Ser Asn Thr Leu Thr Thr Ser Leu Thr Ser Thr
 65 70 75 80
 Ser Ser Glu Ser Asp Thr Gly Gln Glu Ala Glu Tyr Ser Leu Tyr Asp
 85 90 95
 Phe Leu Asp Ser Cys Arg Ala Ser Thr Leu Leu Ala Glu Leu Asp Asp
 100 105 110
 Asp Glu Asp Leu Pro Glu Pro Asp Glu Glu Asp Asp Glu Asn Glu Asp

115	120	125
Asp Asn Gln Glu Asp Gln Glu Tyr Glu Glu Val Met Ile Leu Arg Arg		
130	135	140
Pro Ser Leu Gln Arg Arg Ala Gly Ser Arg Ser Asp Val Thr His His		
145	150	155
Ala Val Thr Ser Gln Leu Pro Gln Val Pro Ala Gly Ala Gly Ser Arg		160
165	170	175
Pro Ile Gly Glu Gln Glu Glu Glu Tyr Glu Thr Lys Gly Gly Arg		190
180	185	190
Arg Arg Thr Trp Asp Asp Asp Tyr Val Leu Lys Arg Gln Phe Ser Ala		205
195	200	205
Leu Val Pro Ala Phe Asp Pro Arg Pro Gly Arg Thr Asn Val Gln Gln		220
210	215	220
Thr Thr Asp Leu Glu Ile Pro Pro Pro Gly Thr Pro His Ser Glu Leu		240
225	230	235
Leu Glu Glu Val Glu Cys Thr Pro Ser Pro Arg Leu Ala Leu Thr Leu		255
245	250	255
Lys Val Thr Gly Leu Gly Thr Thr Arg Glu Val Glu Leu Pro Leu Thr		270
260	265	270
Asn Phe Arg Ser Thr Ile Phe Tyr Tyr Val Gln Lys Leu Leu Gln Leu		285
275	280	285
Ser Cys Asn Gly Asn Val Lys Ser Asp Lys Leu Arg Arg Ile Trp Glu		300
290	295	300
Pro Thr Tyr Thr Ile Met Tyr Arg Glu Met Lys Asp Ser Asp Lys Glu		320
305	310	315
Lys Glu Asn Gly Lys Met Gly Cys Trp Ser Ile Glu His Val Glu Gln		335
325	330	335
Tyr Leu Gly Thr Asp Glu Leu Pro Lys Asn Asp Leu Ile Thr Tyr Leu		350
340	345	350
Gln Lys Asn Ala Asp Ala Ala Phe Leu Arg His Trp Lys Leu Thr Gly		365
355	360	365
Thr Asn Lys Ser Ile Arg Lys Asn Arg Asn Cys Ser Gln Leu Ile Ala		380
370	375	380
Ala Tyr Trp Asp Leu Gly His Gly Thr Lys Ser Gly Leu Asn Gln		400
385	390	395
Gly Ala Ile Ser Thr Leu Gln Ser Ser Asp Ile Leu Asn Leu Thr Lys		415
405	410	415
Glu Gln Pro Gln Ala Lys Ala Gly Asn Gly Gln Asn Ser Cys Gly Val		430
420	425	430
Glu Asp Val Leu Gln Leu Leu Arg Ile Leu Tyr Ile Val Ala Ser Asp		445
435	440	445
Pro Tyr Ser Arg Ile Ser Gln Glu Asp Gly Asp Glu Gln Pro Gln Phe		460
450	455	460
Thr Phe Pro Pro Asp Glu Phe Thr Ser Lys Lys Ile Thr Thr Lys Ile		480
465	470	475
Leu Gln Gln Ile Glu Glu Pro Leu Ala Leu Ala Ser Gly Ala Leu Pro		495
485	490	495
Asp Trp Cys Glu Gln Leu Thr Ser Lys Cys Pro Phe Leu Ile Pro Phe		510
500	505	510
Glu Thr Arg Gln Leu Tyr Phe Thr Cys Thr Ala Phe Gly Ala Ser Arg		525
515	520	525
Ala Ile Val Trp Leu Gln Asn Arg Arg Glu Ala Thr Val Glu Arg Thr		540
530	535	540
Arg Thr Thr Ser Ser Val Arg Arg Asp Asp Pro Gly Glu Phe Arg Val		560
545	550	555
Gly Arg Leu Lys His Glu Arg Val Lys Val Pro Arg Gly Glu Ser Leu		575
565	570	575
Met Glu Trp Ala Glu Asn Val Met Gln Ile His Ala Asp Arg Lys Ser		590
580	585	590
Val Leu Glu Val Glu Phe Leu Gly Glu Glu Gly Thr Gly Leu Gly Pro		605
595	600	605
Thr Leu Glu Phe Tyr Ala Leu Val Ala Ala Glu Phe Gln Arg Thr Asp		620
610	615	620
Leu Gly Ala Trp Leu Cys Asp Asp Asn Phe Pro Asp Asp Glu Ser Arg		

625 630 635 640
 His Val Asp Leu Gly Gly Gly Leu Lys Pro Pro Gly Tyr Tyr Val Gln
 645 650 655
 Arg Ser Cys Gly Leu Phe Thr Ala Pro Phe Pro Gln Asp Ser Asp Glu
 660 665 670
 Leu Glu Arg Ile Thr Lys Leu Phe His Phe Leu Gly Ile Phe Leu Ala
 675 680 685
 Lys Cys Ile Gln Asp Asn Arg Leu Val Asp Leu Pro Ile Ser Lys Pro
 690 695 700
 Phe Phe Lys Leu Met Cys Met Gly Asp Ile Lys Ser Asn Met Ser Lys
 705 710 715 720
 Leu Ile Tyr Glu Ser Arg Gly Asp Arg Asp Leu His Cys Thr Glu Ser
 725 730 735
 Gln Ser Glu Ala Ser Thr Glu Glu Gly His Asp Ser Leu Ser Val Gly
 740 745 750
 Ser Phe Glu Glu Asp Ser Lys Ser Glu Phe Ile Leu Asp Pro Pro Lys
 755 760 765
 Pro Lys Pro Pro Ala Trp Phe Asn Gly Ile Leu Thr Trp Glu Asp Phe
 770 775 780
 Glu Leu Val Asn Pro His Arg Ala Arg Phe Leu Lys Glu Ile Lys Asp
 785 790 795 800
 Leu Ala Ile Lys Arg Arg Gln Ile Leu Ser Asn Lys Gly Leu Ser Glu
 805 810 815
 Asp Glu Lys Asn Thr Lys Leu Gln Glu Leu Val Leu Lys Asn Pro Ser
 820 825 830
 Gly Ser Gly Pro Pro Leu Ser Ile Glu Asp Leu Gly Leu Asn Phe Gln
 835 840 845
 Phe Cys Pro Ser Ser Arg Ile Tyr Gly Phe Thr Ala Val Asp Leu Lys
 850 855 860
 Pro Ser Gly Glu Asp Glu Met Ile Thr Met Asp Asn Ala Glu Glu Tyr
 865 870 875 880
 Val Asp Leu Met Phe Asp Phe Cys Met His Thr Gly Ile Gln Lys Gln
 885 890 895
 Met Glu Ala Phe Arg Asp Gly Phe Asn Lys Val Phe Pro Met Glu Lys
 900 905 910
 Leu Ser Ser Phe Ser His Glu Glu Val Gln Met Ile Leu Cys Gly Asn
 915 920 925
 Gln Ser Pro Ser Trp Ala Ala Glu Asp Ile Ile Asn Tyr Thr Glu Pro
 930 935 940
 Lys Leu Gly Tyr Thr Arg Asp Ser Pro Gly Phe Leu Arg Phe Val Arg
 945 950 955 960
 Val Leu Cys Gly Met Ser Ser Asp Glu Arg Lys Ala Phe Leu Gln Phe
 965 970 975
 Thr Thr Gly Cys Ser Thr Leu Pro Pro Gly Gly Leu Ala Asn Leu His
 980 985 990
 Pro Arg Leu Thr Val Val Arg Lys Val Asp Ala Thr Asp Ala Ser Tyr
 995 1000 1005
 Pro Ser Val Asn Thr Cys Val His Tyr Leu Lys Leu Pro Glu Tyr Ser
 1010 1015 1020
 Ser Glu Glu Ile Met Arg Glu Arg Leu Leu Ala Ala Thr Met Glu Lys
 1025 1030 1035 1040
 Gly Phe His Leu Asn
 1045

<210> 3459

<211> 172

<212> PRT

<213> Homo sapiens

<400> 3459

Ser Cys Gly Pro Arg Gly Leu Ala Ser Leu Gly Leu Gly Phe Ser Gly

1	5	10	15
Arg Cys Asp Asp Gln Asn Lys Gly Arg Ser Asp Gly Pro Glu Ala Gln			
	20	25	30
Ala Glu Ala Cys Ser Gly Glu Arg Thr Tyr Gln Glu Leu Leu Val Asn			
	35	40	45
Gln Asn Pro Ile Ala Gln Pro Leu Ala Ser Arg Arg Leu Thr Arg Lys			
	50	55	60
Leu Tyr Lys Cys Ile Lys Lys Ala Val Lys Gln Lys Gln Ile Arg Arg			
	65	70	75
Gly Val Lys Glu Val Gln Lys Phe Val Asn Lys Gly Glu Lys Gly Ile			
	85	90	95
Met Val Leu Ala Gly Asp Thr Leu Pro Ile Glu Val Tyr Cys His Leu			
	100	105	110
Pro Val Met Cys Glu Asp Arg Asn Leu Pro Tyr Val Tyr Ile Pro Ser			
	115	120	125
Lys Thr Asp Leu Gly Ala Ala Ala Gly Ser Lys Arg Pro Thr Cys Val			
	130	135	140
Ile Met Val Lys Pro His Glu Glu Tyr Gln Glu Ala Tyr Asp Glu Cys			
	145	150	155
Leu Glu Glu Val Gln Ser Leu Pro Leu Pro Leu			160
	165	170	171

<210> 3460

<211> 623

<212> PRT

<213> Homo sapiens

<400> 3460

Gln Val Thr Asn Met Ser Asp Lys Ser Glu Leu Lys Ala Glu Leu Glu			
1	5	10	15
Arg Lys Lys Gln Arg Leu Ala Gln Ile Arg Glu Glu Lys Lys Arg Lys			
	20	25	30
Glu Glu Glu Arg Lys Lys Lys Glu Thr Asp Gln Lys Lys Glu Ala Val			
	35	40	45
Ala Pro Val Gln Glu Glu Ser Asp Leu Glu Lys Lys Arg Arg Glu Ala			
	50	55	60
Glu Ala Leu Leu Gln Ser Met Gly Leu Thr Pro Glu Ser Pro Ile Val			
	65	70	75
Pro Pro Pro Met Ser Pro Ser Ser Lys Ser Val Ser Thr Pro Ser Glu			
	85	90	95
Ala Gly Ser Gln Asp Ser Gly Asp Gly Ala Val Gly Ser Arg Arg Gly			
	100	105	110
Pro Ile Lys Leu Gly Met Ala Lys Ile Thr Gln Val Asp Phe Pro Pro			
	115	120	125
Arg Glu Ile Val Thr Tyr Thr Lys Glu Thr Gln Thr Pro Val Met Ala			
	130	135	140
Gln Pro Lys Glu Asp Glu Glu Glu Asp Asp Asp Val Val Ala Pro Lys			
	145	150	155
Pro Pro Ile Glu Pro Glu Glu Glu Lys Thr Leu Lys Lys Asp Glu Glu			
	165	170	175
Asn Asp Ser Lys Ala Pro Pro His Glu Leu Thr Glu Glu Glu Lys Gln			
	180	185	190
Gln Ile Leu His Ser Glu Glu Phe Leu Ser Phe Phe Asp His Ser Thr			
	195	200	205
Arg Ile Val Glu Arg Ala Leu Ser Glu Gln Ile Asn Ile Phe Phe Asp			
	210	215	220
Tyr Ser Gly Arg Asp Phe Glu Asn Asp Lys Glu Gly Glu Ile Gln Ala			
	225	230	235
Gly Ala Lys Leu Ser Leu Asn Arg Gln Phe Phe Asp Glu Arg Trp Ser			
	245	250	255
Lys Ala Ser Gly Trp Val Ser Cys Leu Asp Trp Ser Ser Gln Tyr Pro			

260 265 270
 Glu Leu Leu Val Ala Ser Tyr Asn Asn Asn Glu Asp Ala Pro His Glu
 275 280 285
 Pro Asp Gly Val Ala Leu Val Trp Asn Met Lys Tyr Lys Lys Thr Thr
 290 295 300
 Pro Glu Tyr Val Phe His Cys Gln Ser Ala Val Met Ser Ala Thr Phe
 305 310 315 320
 Ala Lys Phe His Pro Asn Leu Val Val Gly Gly Thr Tyr Ser Gly Gln
 325 330 335
 Ile Val Leu Trp Asp Asn Arg Ser Asn Lys Arg Thr Pro Val Gln Arg
 340 345 350
 Thr Pro Leu Ser Ala Ala Ala His Thr His Pro Val Tyr Cys Val Asn
 355 360 365
 Val Val Gly Thr Gln Asn Ala His Asn Leu Ile Ser Ile Ser Thr Asp
 370 375 380
 Gly Lys Ile Cys Ser Trp Ser Leu Asp Met Leu Ser His Pro Gln Asp
 385 390 395 400
 Ser Met Glu Leu Val His Lys Gln Ser Lys Ala Val Ala Val Thr Ser
 405 410 415
 Met Ser Phe Pro Val Gly Asp Val Asn Asn Phe Val Val Gly Ser Glu
 420 425 430
 Glu Gly Ser Val Tyr Thr Ala Cys Arg His Gly Ser Lys Ala Gly Ile
 435 440 445
 Ser Glu Met Phe Glu Gly His Gln Gly Pro Ile Thr Gly Ile His Cys
 450 455 460
 His Ala Ala Val Gly Ala Val Asp Phe Ser His Leu Tyr Val Thr Ser
 465 470 475 480
 Ser Phe Asp Trp Thr Val Lys Leu Trp Thr Thr Lys Asn Asn Lys Pro
 485 490 495
 Leu Tyr Ser Phe Glu Asp Asn Ala Gly Tyr Val Tyr Asp Val Met Trp
 500 505 510
 Ser Pro Thr His Pro Ala Leu Phe Ala Cys Val Asp Gly Met Gly Arg
 515 520 525
 Leu Asp Leu Trp Asn Leu Asn Asn Asp Thr Glu Val Pro Thr Ala Ser
 530 535 540
 Ile Ser Val Glu Gly Asn Pro Ala Leu Asn Arg Val Arg Trp Thr His
 545 550 555 560
 Ser Gly Arg Glu Ile Ala Val Gly Asp Ser Glu Gly Gln Ile Val Ile
 565 570 575
 Tyr Asp Val Gly Glu Gln Ile Ala Val Pro Arg Asn Asp Glu Trp Ala
 580 585 590
 Arg Phe Gly Arg Thr Leu Ala Glu Ile Asn Ala Asn Arg Ala Asp Ala
 595 600 605
 Glu Glu Glu Ala Ala Thr Arg Ile Pro Ala
 610 615 618

<210> 3461

<211> 623

<212> PRT

<213> Homo sapiens

<400> 3461

Gln Val Thr Asn Met Ser Asp Lys Ser Glu Leu Lys Ala Glu Leu Glu
 1 5 10 15
 Arg Lys Lys Gln Arg Leu Ala Gln Ile Arg Glu Glu Lys Lys Arg Lys
 20 25 30
 Glu Glu Glu Arg Lys Lys Lys Glu Thr Asp Gln Lys Lys Glu Ala Val
 35 40 45
 Ala Pro Val Gln Glu Glu Ser Asp Leu Glu Lys Lys Arg Arg Glu Ala
 50 55 60
 Glu Ala Leu Leu Gln Ser Met Gly Leu Thr Pro Glu Ser Pro Ile Val

65					70					75				80	
Pro	Pro	Pro	Met	Ser	Pro	Ser	Ser	Lys	Ser	Val	Ser	Thr	Pro	Ser	Glu
			85						90					95	
Ala	Gly	Ser	Gln	Asp	Ser	Gly	Asp	Gly	Ala	Val	Gly	Ser	Arg	Arg	Gly
			100					105					110		
Pro	Ile	Lys	Leu	Gly	Met	Ala	Lys	Ile	Thr	Gln	Val	Asp	Phe	Pro	Pro
		115					120					125			
Arg	Glu	Ile	Val	Thr	Tyr	Thr	Lys	Glu	Thr	Gln	Thr	Pro	Val	Met	Ala
	130					135					140				
Gln	Pro	Lys	Glu	Asp	Glu	Glu	Glu	Asp	Asp	Asp	Val	Val	Ala	Pro	Lys
145					150				155					160	
Pro	Pro	Ile	Glu	Pro	Glu	Glu	Glu	Lys	Thr	Leu	Lys	Lys	Asp	Glu	Glu
			165					170						175	
Asn	Asp	Ser	Lys	Ala	Pro	Pro	His	Glu	Leu	Thr	Glu	Glu	Glu	Lys	Gln
		180					185						190		
Gln	Ile	Leu	His	Ser	Glu	Glu	Phe	Leu	Ser	Phe	Phe	Asp	His	Ser	Thr
	195						200					205			
Arg	Ile	Val	Glu	Arg	Ala	Leu	Ser	Glu	Gln	Ile	Asn	Ile	Phe	Phe	Asp
	210					215					220				
Tyr	Ser	Gly	Arg	Asp	Phe	Glu	Asn	Asp	Lys	Glu	Gly	Glu	Ile	Gln	Ala
225					230					235				240	
Gly	Ala	Lys	Leu	Ser	Leu	Asn	Arg	Gln	Phe	Phe	Asp	Glu	Arg	Trp	Ser
			245					250						255	
Lys	Ala	Ser	Gly	Trp	Val	Ser	Cys	Leu	Asp	Trp	Ser	Ser	Gln	Tyr	Pro
	260							265					270		
Glu	Leu	Leu	Val	Ala	Ser	Tyr	Asn	Asn	Asn	Glu	Asp	Ala	Pro	His	Glu
	275						280					285			
Pro	Asp	Gly	Val	Ala	Leu	Val	Trp	Asn	Met	Lys	Tyr	Lys	Lys	Thr	Thr
	290					295					300				
Pro	Glu	Tyr	Val	Phe	His	Cys	Gln	Ser	Ala	Val	Met	Ser	Ala	Thr	Phe
305					310				315					320	
Ala	Lys	Phe	His	Pro	Asn	Leu	Val	Val	Gly	Gly	Thr	Tyr	Ser	Gly	Gln
			325					330						335	
Ile	Val	Leu	Trp	Asp	Asn	Arg	Ser	Asn	Lys	Arg	Thr	Pro	Val	Gln	Arg
		340						345					350		
Thr	Pro	Leu	Ser	Ala	Ala	Ala	His	Thr	His	Pro	Val	Tyr	Cys	Val	Asn
	355					360						365			
Val	Val	Gly	Thr	Gln	Asn	Ala	His	Asn	Leu	Ile	Ser	Ile	Ser	Thr	Asp
	370					375					380				
Gly	Lys	Ile	Cys	Ser	Trp	Ser	Leu	Asp	Met	Leu	Ser	His	Pro	Gln	Asp
385					390				395					400	
Ser	Met	Glu	Leu	Val	His	Lys	Gln	Ser	Lys	Ala	Val	Ala	Val	Thr	Ser
			405					410					415		
Met	Ser	Phe	Pro	Val	Gly	Asp	Val	Asn	Asn	Phe	Val	Val	Gly	Ser	Glu
		420						425					430		
Glu	Gly	Ser	Val	Tyr	Thr	Ala	Cys	Arg	His	Gly	Ser	Lys	Ala	Gly	Ile
	435					440					445				
Ser	Glu	Met	Phe	Glu	Gly	His	Gln	Gly	Pro	Ile	Thr	Gly	Ile	His	Cys
	450					455					460				
His	Ala	Ala	Val	Gly	Ala	Val	Asp	Phe	Ser	His	Leu	Tyr	Val	Thr	Ser
465					470				475					480	
Ser	Phe	Asp	Trp	Thr	Val	Lys	Leu	Trp	Thr	Thr	Lys	Asn	Asn	Lys	Pro
			485					490					495		
Leu	Tyr	Ser	Phe	Glu	Asp	Asn	Ala	Gly	Tyr	Val	Tyr	Asp	Val	Met	Trp
		500						505					510		
Ser	Pro	Thr	His	Pro	Ala	Leu	Phe	Ala	Cys	Val	Asp	Gly	Met	Gly	Arg
	515						520					525			
Leu	Asp	Leu	Trp	Asn	Leu	Asn	Asn	Asp	Thr	Glu	Val	Pro	Thr	Ala	Ser
	530					535					540				
Ile	Ser	Val	Glu	Gly	Asn	Pro	Ala	Leu	Asn	Arg	Val	Arg	Trp	Thr	His
545					550				555					560	
Ser	Gly	Arg	Glu	Ile	Ala	Val	Gly	Asp	Ser	Glu	Gly	Gln	Ile	Val	Ile
			565					570					575		
Tyr	Asp	Val	Gly	Glu	Gln	Ile	Ala	Val	Pro	Arg	Asn	Asp	Glu	Trp	Ala

580 585 590
 Arg Phe Gly Arg Thr Leu Ala Glu Ile Asn Ala Asn Arg Ala Asp Ala
 595 600 605
 Glu Glu Glu Ala Ala Thr Arg Ile Pro Ala
 610 615 618

<210> 3462
 <211> 880
 <212> PRT
 <213> Homo sapiens

<400> 3462
 Thr Ala Pro Glu Phe Ser Arg Ser Thr His Ala Ser Ala His Ala Ser
 1 5 10 15
 Val Ala Arg Val Leu Arg Asn Arg Glu Ile Ala Gln Leu Lys Lys Glu
 20 25 30
 Gln Arg Arg Gln Glu Phe Gln Ile Arg Ala Leu Glu Ser Gln Lys Arg
 35 40 45
 Gln Gln Glu Met Val Leu Arg Arg Lys Thr Gln Glu Val Ser Ala Leu
 50 55 60
 Arg Arg Leu Ala Lys Pro Met Ser Glu Arg Val Ala Gly Arg Ala Gly
 65 70 75 80
 Leu Lys Pro Pro Met Leu Asp Ser Gly Ala Glu Val Ser Ala Ser Thr
 85 90 95
 Thr Ser Ser Glu Ala Glu Ser Gly Ala Arg Ser Val Ser Ser Ile Val
 100 105 110
 Arg Gln Trp Asn Arg Lys Ile Asn His Phe Leu Gly Asp His Pro Ala
 115 120 125
 Pro Thr Val Asn Gly Thr Arg Pro Ala Arg Lys Lys Phe Gln Lys Lys
 130 135 140
 Gly Ala Ser Gln Ser Phe Ser Lys Ala Ala Arg Leu Lys Trp Gln Ser
 145 150 155 160
 Leu Glu Arg Arg Ile Ile Asp Ile Val Met Gln Arg Met Thr Ile Val
 165 170 175
 Asn Leu Glu Ala Asp Met Glu Arg Leu Ile Lys Lys Arg Glu Glu Leu
 180 185 190
 Phe Leu Leu Gln Glu Ala Leu Arg Arg Lys Arg Glu Arg Leu Gln Ala
 195 200 205
 Glu Ser Pro Glu Glu Glu Lys Gly Leu Gln Glu Leu Ala Glu Glu Ile
 210 215 220
 Glu Val Leu Ala Ala Asn Ile Asp Tyr Ile Asn Asp Gly Ile Thr Asp
 225 230 235 240
 Cys Gln Ala Thr Ile Val Gln Leu Glu Thr Lys Glu Glu Leu Asp
 245 250 255
 Ser Thr Asp Thr Ser Val Val Ile Ser Ser Cys Ser Leu Ala Glu Ala
 260 265 270
 Arg Leu Leu Leu Asp Asn Phe Leu Lys Ala Ser Ile Asp Lys Gly Leu
 275 280 285
 Gln Val Ala Gln Lys Glu Ala Gln Ile Arg Leu Leu Glu Gly Arg Leu
 290 295 300
 Arg Gln Thr Asp Met Ala Gly Ser Ser Gln Asn His Leu Leu Leu Asp
 305 310 315 320
 Ala Leu Arg Glu Lys Ala Glu Ala His Pro Glu Leu Gln Ala Leu Ile
 325 330 335
 Tyr Asn Val Gln Gln Glu Asn Gly Tyr Ala Ser Thr Asp Glu Glu Ile
 340 345 350
 Ser Glu Phe Ser Glu Gly Ser Phe Ser Gln Ser Phe Thr Met Lys Gly
 355 360 365
 Ser Thr Ser His Asp Asp Phe Lys Phe Lys Ser Glu Pro Lys Leu Ser
 370 375 380
 Ala Gln Met Lys Ala Val Ser Ala Glu Cys Leu Gly Pro Pro Leu Asp

385		390		395		400
Ile Ser Thr Lys Asn	Ile Thr Lys Ser Leu Ala Ser Leu Val Glu Ile					
	405		410			415
Lys Glu Asp Gly Val Gly Phe Ser Val Arg Asp Pro Tyr Tyr Arg Asp						
	420		425			430
Arg Val Ser Arg Thr Val Ser Leu Pro Thr Arg Gly Ser Thr Phe Pro						
	435		440			445
Arg Gln Ser Arg Ala Thr Glu Thr Ser Pro Leu Thr Arg Arg Lys Ser						
	450		455			460
Tyr Asp Arg Gly Gln Pro Ile Arg Ser Thr Asp Val Gly Phe Thr Pro						
465		470		475		480
Pro Ser Ser Pro Pro Thr Arg Pro Arg Asn Asp Arg Asn Val Phe Ser						
	485		490			495
Arg Leu Thr Ser Asn Gln Ser Gln Gly Ser Ala Leu Asp Lys Ser Asp						
	500		505			510
Asp Ser Asp Ser Ser Leu Ser Glu Val Leu Arg Gly Ile Ile Ser Pro						
	515		520			525
Val Gly Gly Ala Lys Gly Ala Arg Thr Ala Pro Leu Gln Cys Val Ser						
	530		535			540
Met Ala Glu Gly His Thr Lys Pro Ile Leu Cys Leu Asp Ala Thr Asp						
545		550		555		560
Glu Leu Leu Phe Thr Gly Ser Lys Asp Arg Ser Cys Lys Met Trp Asn						
	565		570			575
Leu Val Thr Gly Gln Glu Ile Ala Ala Leu Lys Gly His Pro Asn Asn						
	580		585			590
Val Val Ser Ile Lys Tyr Cys Ser His Ser Gly Leu Val Phe Ser Val						
	595		600			605
Ser Thr Ser Tyr Ile Lys Val Trp Asp Ile Arg Asp Ser Ala Lys Cys						
	610		615			620
Ile Arg Thr Leu Thr Ser Ser Gly Gln Val Ile Ser Gly Asp Ala Cys						
625		630		635		640
Ala Ala Thr Ser Thr Arg Ala Ile Thr Ser Ala Gln Gly Glu His Gln						
	645		650			655
Ile Asn Gln Ile Ala Leu Ser Pro Ser Gly Thr Met Leu Tyr Ala Ala						
	660		665			670
Ser Gly Asn Ala Val Arg Ile Trp Glu Leu Ser Arg Phe Gln Pro Val						
	675		680			685
Gly Lys Leu Thr Gly His Ile Gly Pro Val Met Cys Leu Thr Val Thr						
	690		695			700
Gln Thr Ala Ser Gln His Asp Leu Val Val Thr Gly Ser Lys Asp His						
705		710		715		720
Tyr Val Lys Met Phe Glu Leu Gly Glu Cys Val Thr Gly Thr Ile Gly						
	725		730			735
Pro Thr His Asn Phe Glu Pro Pro His Tyr Asp Gly Ile Glu Cys Leu						
	740		745			750
Ala Ile Gln Gly Asp Ile Leu Phe Ser Gly Ser Arg Asp Asn Gly Ile						
	755		760			765
Lys Lys Trp Asp Leu Asp Gln Gln Glu Leu Ile Gln Gln Ile Pro Asn						
	770		775			780
Ala His Lys Asp Trp Val Cys Ala Leu Ala Phe Ile Pro Gly Arg Pro						
785		790		795		800
Met Leu Leu Ser Ala Cys Arg Ala Gly Val Ile Lys Val Trp Asn Val						
	805		810			815
Asp Asn Phe Thr Pro Ile Gly Glu Ile Lys Gly His Asp Ser Pro Ile						
	820		825			830
Asn Ala Ile Cys Thr Asn Ala Lys His Ile Phe Thr Ala Ser Ser Gly						
	835		840			845
Cys Arg Val Lys Val Trp Asn Tyr Val Pro Gly Leu Thr Pro Cys Leu						
	850		855			860
Pro Arg Arg Val Leu Ala Ile Lys Gly Arg Ala Thr Thr Leu Pro						
865		870		875		879

<210> 3463
 <211> 988
 <212> PRT
 <213> Homo sapiens

<400> 3463

Ser	Gly	Glu	Pro	Arg	Pro	Glu	Pro	Gly	Asn	Met	Ala	Thr	Cys	Ile	Gly	1	5	10	15
Glu	Lys	Ile	Glu	Asp	Phe	Lys	Val	Gly	Asn	Leu	Leu	Gly	Lys	Gly	Ser	20	25	30	
Phe	Ala	Gly	Val	Tyr	Arg	Ala	Glu	Ser	Ile	His	Thr	Gly	Leu	Glu	Val	35	40	45	
Ala	Ile	Lys	Met	Ile	Asp	Lys	Lys	Ala	Met	Tyr	Lys	Ala	Gly	Met	Val	50	55	60	
Gln	Arg	Val	Gln	Asn	Glu	Val	Lys	Ile	His	Cys	Gln	Leu	Lys	His	Pro	65	70	75	80
Ser	Ile	Leu	Glu	Leu	Tyr	Asn	Tyr	Phe	Glu	Asp	Ser	Asn	Tyr	Val	Tyr	85	90	95	
Leu	Val	Leu	Glu	Met	Cys	His	Asn	Gly	Glu	Met	Asn	Arg	Tyr	Leu	Lys	100	105	110	
Asn	Arg	Val	Lys	Pro	Phe	Ser	Glu	Asn	Glu	Ala	Arg	His	Phe	Met	His	115	120	125	
Gln	Ile	Ile	Thr	Gly	Met	Leu	Tyr	Leu	His	Ser	His	Gly	Ile	Leu	His	130	135	140	
Arg	Asp	Leu	Thr	Leu	Ser	Asn	Leu	Leu	Leu	Thr	Arg	Asn	Met	Asn	Ile	145	150	155	160
Lys	Ile	Ala	Asp	Phe	Gly	Leu	Ala	Thr	Gln	Leu	Lys	Met	Pro	His	Glu	165	170	175	
Lys	His	Tyr	Thr	Leu	Cys	Gly	Thr	Pro	Asn	Tyr	Ile	Ser	Pro	Glu	Ile	180	185	190	
Ala	Thr	Arg	Ser	Ala	His	Gly	Leu	Glu	Ser	Asp	Val	Trp	Ser	Leu	Gly	195	200	205	
Cys	Met	Phe	Tyr	Thr	Leu	Leu	Ile	Gly	Arg	Pro	Pro	Phe	Asp	Thr	Asp	210	215	220	
Thr	Val	Lys	Asn	Thr	Leu	Asn	Lys	Val	Val	Leu	Ala	Asp	Tyr	Glu	Met	225	230	235	240
Pro	Thr	Phe	Leu	Ser	Ile	Glu	Ala	Lys	Asp	Leu	Ile	His	Gln	Leu	Leu	245	250	255	
Arg	Arg	Asn	Pro	Ala	Asp	Arg	Leu	Ser	Leu	Ser	Ser	Val	Leu	Asp	His	260	265	270	
Pro	Phe	Met	Ser	Arg	Asn	Ser	Ser	Thr	Lys	Ser	Lys	Asp	Leu	Gly	Thr	275	280	285	
Val	Glu	Asp	Ser	Ile	Asp	Ser	Gly	His	Ala	Thr	Ile	Ser	Thr	Ala	Ile	290	295	300	
Thr	Ala	Ser	Ser	Ser	Thr	Ser	Ile	Ser	Gly	Ser	Leu	Phe	Asp	Lys	Arg	305	310	315	320
Arg	Leu	Leu	Ile	Gly	Gln	Pro	Leu	Pro	Asn	Lys	Met	Thr	Val	Phe	Pro	325	330	335	
Lys	Asn	Lys	Ser	Ser	Thr	Asp	Phe	Ser	Ser	Ser	Gly	Asp	Gly	Asn	Ser	340	345	350	
Phe	Tyr	Thr	Gln	Trp	Gly	Asn	Gln	Glu	Thr	Ser	Asn	Ser	Gly	Arg	Gly	355	360	365	
Arg	Val	Ile	Gln	Asp	Ala	Glu	Glu	Arg	Pro	His	Ser	Arg	Tyr	Leu	Arg	370	375	380	
Arg	Ala	Tyr	Ser	Ser	Asp	Arg	Ser	Gly	Thr	Ser	Asn	Ser	Gln	Ser	Gln	385	390	395	400
Ala	Lys	Thr	Tyr	Thr	Met	Glu	Arg	Cys	His	Ser	Ala	Glu	Met	Leu	Ser	405	410	415	
Val	Ser	Lys	Arg	Ser	Gly	Gly	Gly	Glu	Asn	Glu	Glu	Arg	Tyr	Ser	Pro	420	425	430	
Thr	Asp	Asn	Ala	Asn	Ile	Phe	Asn	Phe	Phe	Lys	Glu	Lys	Thr	Ser	435	440	445		
Ser	Ser	Ser	Gly	Ser	Phe	Glu	Arg	Pro	Asp	Asn	Asn	Gln	Ala	Leu	Ser				

450	Asn	His	Leu	Cys	Pro	Gly	Lys	Thr	Pro	Phe	Pro	Phe	Ala	Asp	Pro	Thr
465	Pro	Gln	Thr	Glu	Thr	Val	Gln	Gln	Trp	Phe	Gly	Asn	Leu	Gln	Ile	Asn
					485					490						495
Ala	His	Leu	Arg	Lys	Thr	Thr	Glu	Tyr	Asp	Ser	Ile	Ser	Pro	Asn	Arg	
			500					505					510			
Asp	Phe	Gln	Gly	His	Pro	Asp	Leu	Gln	Lys	Asp	Thr	Ser	Lys	Asn	Ala	
		515					520					525				
Trp	Thr	Asp	Thr	Lys	Val	Lys	Lys	Asn	Ser	Asp	Ala	Ser	Asp	Asn	Ala	
		530				535					540					
His	Ser	Val	Lys	Gln	Gln	Asn	Thr	Met	Lys	Tyr	Met	Thr	Ala	Leu	His	
545					550					555					560	
Ser	Lys	Pro	Glu	Ile	Ile	Gln	Gln	Glu	Cys	Val	Phe	Gly	Ser	Asp	Pro	
				565					570					575		
Leu	Ser	Glu	Gln	Ser	Lys	Thr	Arg	Gly	Met	Glu	Pro	Pro	Trp	Gly	Tyr	
			580					585					590			
Gln	Asn	Arg	Thr	Leu	Arg	Ser	Ile	Thr	Ser	Pro	Leu	Val	Ala	His	Arg	
		595					600					605				
Leu	Lys	Pro	Ile	Arg	Gln	Lys	Thr	Lys	Lys	Ala	Val	Val	Ser	Ile	Leu	
	610					615					620					
Asp	Ser	Glu	Glu	Val	Cys	Val	Glu	Leu	Val	Lys	Glu	Tyr	Ala	Ser	Gln	
625					630					635					640	
Glu	Tyr	Val	Lys	Glu	Val	Leu	Gln	Ile	Ser	Ser	Asp	Gly	Asn	Thr	Ile	
				645					650					655		
Thr	Ile	Tyr	Tyr	Pro	Asn	Gly	Gly	Arg	Gly	Phe	Pro	Leu	Ala	Asp	Arg	
		660						665					670			
Pro	Pro	Ser	Pro	Thr	Asp	Asn	Ile	Ser	Arg	Tyr	Ser	Phe	Asp	Asn	Leu	
		675					680					685				
Pro	Glu	Lys	Tyr	Trp	Arg	Lys	Tyr	Gln	Tyr	Ala	Ser	Arg	Phe	Val	Gln	
	690					695					700					
Leu	Val	Arg	Ser	Lys	Ser	Pro	Lys	Ile	Thr	Tyr	Phe	Thr	Arg	Tyr	Ala	
705					710					715					720	
Lys	Cys	Ile	Leu	Met	Glu	Asn	Ser	Pro	Gly	Ala	Asp	Phe	Glu	Val	Trp	
				725					730					735		
Phe	Tyr	Asp	Gly	Val	Lys	Ile	His	Lys	Thr	Glu	Asp	Phe	Ile	Gln	Val	
		740						745					750			
Ile	Glu	Lys	Thr	Gly	Lys	Ser	Tyr	Thr	Leu	Lys	Ser	Glu	Ser	Glu	Val	
	755						760					765				
Asn	Ser	Leu	Lys	Glu	Glu	Ile	Lys	Met	Tyr	Met	Asp	His	Ala	Asn	Glu	
	770					775					780					
Gly	His	Arg	Ile	Cys	Leu	Ala	Leu	Glu	Ser	Ile	Ile	Ser	Glu	Glu	Glu	
785					790					795					800	
Arg	Lys	Thr	Arg	Ser	Ala	Pro	Phe	Phe	Pro	Ile	Ile	Ile	Gly	Arg	Lys	
				805					810					815		
Pro	Gly	Ser	Thr	Ser	Ser	Pro	Lys	Ala	Leu	Ser	Pro	Pro	Pro	Ser	Val	
		820						825					830			
Asp	Ser	Asn	Tyr	Pro	Thr	Arg	Asp	Arg	Ala	Ser	Phe	Asn	Arg	Met	Val	
		835					840						845			
Met	His	Ser	Ala	Ala	Ser	Pro	Thr	Gln	Ala	Pro	Ile	Leu	Asn	Pro	Ser	
	850					855					860					
Met	Val	Thr	Asn	Glu	Gly	Leu	Gly	Leu	Thr	Thr	Thr	Ala	Ser	Gly	Thr	
865					870				875						880	
Asp	Ile	Ser	Ser	Asn	Ser	Leu	Lys	Asp	Cys	Leu	Pro	Lys	Ser	Ala	Gln	
				885					890					895		
Leu	Leu	Lys	Ser	Val	Phe	Val	Lys	Asn	Val	Gly	Trp	Ala	Thr	Gln	Leu	
		900						905					910			
Thr	Ser	Gly	Ala	Val	Trp	Val	Gln	Phe	Asn	Asp	Gly	Ser	Gln	Leu	Val	
		915					920					925				
Val	Gln	Ala	Gly	Val	Ser	Ser	Ile	Ser	Tyr	Thr	Ser	Pro	Asn	Gly	Gln	
	930					935				940						
Thr	Thr	Arg	Tyr	Gly	Glu	Asn	Glu	Lys	Leu	Pro	Asp	Tyr	Ile	Lys	Gln	
945					950					955					960	
Lys	Leu	Gln	Cys	Leu	Ser	Ser	Ile	Leu	Leu	Met	Phe	Ser	Asn	Pro	Thr	

Pro Asn Phe His
980

965

970

975

<210> 3464
<211> 111
<212> PRT
<213> Homo sapiens

<400> 3464
Ala Val Arg Thr Val Ser Gly Thr Ser Leu Gly Pro Arg Ser His Ser
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Arg Ser Pro Gly Arg Cys His Cys Phe Ser Ala Val Thr Phe Ser Ser
20 25 30
Pro Arg Leu Ala Ala Ser Glu Ala Pro Asp Pro Met Glu Glu Trp Asp
35 40 45
Val Pro Gln Met Lys Lys Glu Val Glu Ser Leu Lys Tyr Gln Leu Ala
50 55 60
Phe Gln Arg Glu Met Ala Ser Lys Thr Ile Pro Glu Leu Leu Lys Trp
65 70 75 80
Ile Glu Asp Gly Ile Pro Lys Asp Pro Phe Leu Asn Pro Asp Leu Met
85 90 95
Lys Asn Asn Pro Trp Val Glu Lys Gly Lys Cys Thr Ile Leu
100 105 110

<210> 3465
<211> 1713
<212> PRT
<213> Homo sapiens

<400> 3465
Val Arg Lys Leu Asp Arg Glu Arg Val Gly Ala Trp Trp Arg Gly Ala
1 5 10 15
Trp Ala Arg His Pro Arg Gln Glu Ala Gly Glu His Ala Lys Arg Arg
20 25 30
Lys Gly His Ala Glu Thr Pro Arg Gly Arg Arg Lys Gly Arg Ala Gly
35 40 45
Arg Ser Ala Ala Ala Val Gly Glu Leu Arg Pro Ala Arg Arg Ser Leu
50 55 60
Glu Thr Ser Arg Ala Ala Ala Met Ala Lys Asp Ser Pro Ser Pro
65 70 75 80
Leu Gly Ala Ser Pro Lys Lys Pro Gly Cys Ser Ser Pro Ala Ala Ala
85 90 95
Val Leu Glu Asn Gln Arg Arg Glu Leu Glu Lys Leu Arg Ala Glu Leu
100 105 110
Glu Ala Glu Arg Ala Gly Trp Arg Ala Glu Arg Arg Arg Phe Ala Ala
115 120 125
Arg Glu Arg Gln Leu Arg Glu Ala Glu Arg Glu Arg Arg Gln Leu
130 135 140
Ala Asp Arg Leu Arg Ser Lys Trp Glu Ala Gln Arg Ser Arg Glu Leu
145 150 155 160
Arg Gln Leu Gln Glu Glu Met Gln Arg Glu Arg Glu Ala Glu Ile Arg
165 170 175
Gln Leu Leu Arg Trp Lys Glu Ala Glu Gln Arg Gln Leu Gln Gln Leu
180 185 190
Leu His Arg Glu Arg Asp Gly Val Val Arg Gln Ala Arg Glu Leu Gln
195 200 205
Arg Gln Leu Ala Glu Glu Leu Val Asn Arg Gly His Cys Ser Arg Pro

210	215	220
Gly Ala Ser Glu Val	Ser Ala Ala Gln Cys Arg	Cys Arg Leu Gln Glu
225	230	235
Val Leu Ala Gln Leu Arg	Trp Gln Thr Asp Gly Glu Gln Ala Ala Arg	240
245	250	255
Ile Arg Tyr Leu Gln Ala	Ala Leu Glu Val Glu Arg Gln Leu Phe Leu	260
260	265	270
Lys Tyr Ile Leu Ala His	Phe Arg Gly His Pro Ala Leu Ser Gly Ser	275
275	280	285
Pro Asp Pro Gln Ala Val	His Ser Leu Glu Glu Pro Leu Pro Gln Thr	290
290	295	300
Ser Ser Gly Ser Cys His	Ala Pro Lys Pro Ala Cys Gln Leu Gly Ser	305
305	310	315
Leu Asp Ser Leu Ser Ala	Glu Val Gly Val Arg Ser Arg Ser Leu Gly	320
325	330	335
Leu Val Ser Ser Ala Cys	Ser Ser Ser Pro Asp Gly Leu Leu Ser Thr	340
340	345	350
His Ala Ser Ser Leu Asp	Cys Phe Ala Pro Ala Cys Ser Arg Ser Leu	355
355	360	365
Asp Ser Thr Arg Ser Leu	Pro Lys Ala Ser Lys Ser Glu Glu Arg Pro	370
370	375	380
Ser Ser Pro Asp Thr Ser	Thr Pro Gly Ser Arg Arg Leu Ser Pro Pro	385
385	390	395
Pro Ser Pro Leu Pro Pro	Pro Pro Pro Pro Ser Ala His Arg Lys Leu	400
405	410	415
Ser Asn Pro Arg Gly Gly	Glu Gly Ser Glu Ser Gln Pro Cys Glu Val	420
420	425	430
Leu Thr Pro Ser Pro Pro	Gly Leu Gly His His Glu Leu Ile Lys Leu	435
435	440	445
Asn Trp Leu Leu Ala Lys	Ala Leu Trp Val Leu Ala Arg Arg Cys Tyr	450
450	455	460
Thr Leu Gln Glu Glu Asn	Lys Gln Leu Arg Arg Ala Gly Cys Pro Tyr	465
465	470	475
Gln Ala Asp Glu Lys Val	Lys Arg Leu Lys Val Lys Arg Ala Glu Leu	480
485	490	495
Thr Gly Leu Ala Arg Arg	Leu Ala Asp Arg Ala Arg Glu Leu Gln Glu	500
500	505	510
Thr Asn Leu Arg Ala Val	Ser Ala Pro Ile Pro Gly Glu Ser Cys Ala	515
515	520	525
Gly Leu Glu Leu Cys Gln	Val Phe Ala Arg Gln Arg Ala Arg Asp Leu	530
530	535	540
Ser Glu Gln Ala Ser Ala	Pro Leu Ala Lys Asp Lys Gln Ile Glu Glu	545
545	550	555
Leu Arg Gln Glu Cys His	Leu Leu Gln Ala Arg Val Ala Ser Gly Pro	560
565	570	575
Cys Ser Asp Leu His Thr	Gly Arg Gly Gly Pro Cys Thr Gln Trp Leu	580
580	585	590
Asn Val Arg Asp Leu Asp	Arg Leu Gln Arg Glu Ser Gln Arg Glu Val	595
595	600	605
Leu Arg Leu Gln Arg Gln	Leu Met Leu Gln Gln Gly Asn Gly Gly Ala	610
610	615	620
Trp Pro Glu Ala Gly Gly	Gln Ser Ala Thr Cys Glu Glu Val Arg Arg	625
625	630	635
Gln Met Leu Ala Leu Glu	Arg Glu Leu Asp Gln Arg Arg Arg Glu Cys	640
645	650	655
Gln Glu Leu Gly Ala Gln	Ala Ala Pro Ala Arg Arg Arg Gly Glu Glu	660
660	665	670
Ala Glu Thr Gln Leu Gln	Ala Ala Leu Leu Lys Asn Ala Trp Leu Ala	675
675	680	685
Glu Glu Asn Gly Arg Leu	Gln Ala Lys Thr Asp Trp Val Arg Lys Val	690
690	695	700
Glu Ala Glu Asn Ser Glu	Val Arg Gly His Leu Gly Arg Ala Cys Gln	705
705	710	715
Glu Arg Asp Ala Ser Gly	Leu Ile Ala Glu Gln Leu Leu Gln Gln Ala	720

				725						730				735	
Ala	Arg	Gly	Gln	Asp	Arg	Gln	Gln	Gln	Leu	Gln	Arg	Asp	Pro	Gln	Lys
			740					745					750		
Ala	Leu	Cys	Asp	Leu	His	Pro	Ser	Trp	Lys	Glu	Ile	Gln	Ala	Leu	Gln
		755					760					765			
Cys	Arg	Pro	Gly	His	Pro	Pro	Glu	Gln	Pro	Trp	Glu	Thr	Ser	Gln	Met
		770				775					780				
Pro	Glu	Ser	Gln	Val	Lys	Gly	Ser	Arg	Arg	Pro	Lys	Phe	His	Ala	Arg
785					790					795					800
Ala	Glu	Asp	Tyr	Ala	Val	Ser	Gln	Pro	Asn	Arg	Asp	Ile	Gln	Glu	Lys
				805					810					815	
Arg	Glu	Ala	Ser	Leu	Glu	Glu	Ser	Pro	Val	Ala	Leu	Gly	Glu	Ser	Ala
			820					825					830		
Ser	Val	Pro	Gln	Val	Ser	Glu	Thr	Val	Pro	Ala	Ser	Gln	Pro	Leu	Ser
		835					840					845			
Lys	Lys	Thr	Ser	Ser	Gln	Ser	Asn	Ser	Ser	Ser	Glu	Gly	Ser	Met	Trp
	850					855					860				
Ala	Thr	Val	Pro	Ser	Ser	Pro	Thr	Leu	Asp	Arg	Asp	Thr	Ala	Ser	Glu
865					870					875					880
Val	Asp	Asp	Leu	Glu	Pro	Asp	Ser	Val	Ser	Leu	Ala	Leu	Glu	Met	Gly
				885					890					895	
Gly	Ser	Ala	Ala	Pro	Ala	Ala	Pro	Lys	Leu	Lys	Ile	Phe	Met	Ala	Gln
			900					905					910		
Tyr	Asn	Tyr	Asn	Pro	Phe	Glu	Gly	Pro	Asn	Asp	His	Pro	Glu	Gly	Glu
	915						920					925			
Leu	Pro	Leu	Thr	Ala	Gly	Asp	Tyr	Ile	Tyr	Ile	Phe	Gly	Asp	Met	Asp
	930					935					940				
Glu	Asp	Gly	Phe	Tyr	Glu	Gly	Glu	Leu	Glu	Asp	Gly	Arg	Arg	Gly	Leu
945					950					955					960
Val	Pro	Ser	Asn	Phe	Val	Glu	Gln	Ile	Pro	Asp	Ser	Tyr	Ile	Pro	Gly
				965					970					975	
Cys	Leu	Pro	Ala	Lys	Ser	Pro	Asp	Leu	Gly	Pro	Ser	Gln	Leu	Pro	Ala
			980					985					990		
Gly	Gln	Asp	Glu	Ala	Leu	Glu	Glu	Asp	Ser	Leu	Leu	Ser	Gly	Lys	Ala
	995						1000					1005			
Gln	Gly	Val	Val	Asp	Arg	Gly	Leu	Cys	Gln	Met	Val	Arg	Val	Gly	Ser
	1010					1015					1020				
Lys	Thr	Glu	Val	Ala	Thr	Glu	Ile	Leu	Asp	Thr	Lys	Thr	Glu	Ala	Cys
1025					1030					1035					1040
Gln	Leu	Gly	Leu	Leu	Gln	Ser	Met	Gly	Lys	Gln	Gly	Leu	Ser	Arg	Pro
				1045					1050					1055	
Leu	Leu	Gly	Thr	Lys	Gly	Val	Leu	Arg	Met	Ala	Pro	Met	Gln	Leu	His
		1060						1065					1070		
Leu	Gln	Asn	Val	Thr	Ala	Thr	Ser	Ala	Asn	Ile	Thr	Trp	Val	Tyr	Ser
		1075					1080					1085			
Ser	His	Arg	His	Pro	His	Val	Val	Tyr	Leu	Asp	Asp	Arg	Glu	His	Ala
	1090					1095					1100				
Leu	Thr	Pro	Ala	Gly	Val	Ser	Cys	Tyr	Thr	Phe	Gln	Gly	Leu	Cys	Pro
1105					1110					1115					1120
Gly	Thr	His	Tyr	Arg	Ala	Arg	Val	Glu	Val	Arg	Leu	Pro	Arg	Asp	Leu
				1125					1130					1135	
Leu	Gln	Val	Tyr	Trp	Gly	Thr	Met	Ser	Ser	Thr	Val	Thr	Phe	Asp	Thr
		1140						1145					1150		
Leu	Leu	Ala	Gly	Pro	Pro	Tyr	Pro	Pro	Leu	Asp	Val	Leu	Val	Glu	Arg
		1155					1160					1165			
His	Ala	Ser	Pro	Gly	Val	Leu	Val	Val	Ser	Trp	Leu	Pro	Val	Thr	Ile
	1170					1175					1180				
Asp	Ser	Ala	Gly	Ser	Ser	Asn	Gly	Val	Gln	Val	Thr	Gly	Tyr	Ala	Val
1185					1190					1195					1200
Tyr	Ala	Asp	Gly	Leu	Lys	Val	Cys	Glu	Val	Ala	Asp	Ala	Thr	Ala	Gly
				1205					1210					1215	
Ser	Thr	Leu	Leu	Glu	Phe	Ser	Gln	Leu	Gln	Val	Pro	Leu	Thr	Trp	Gln
		1220						1225					1230		
Lys	Val	Ser	Val	Arg	Thr	Met	Ser	Leu	Cys	Gly	Glu	Ser	Leu	Asp	Ser

1235	1240	1245
Val Pro Ala Gln Ile Pro Glu Asp Phe Phe Met Cys His Arg Trp Pro		
1250	1255	1260
Glu Thr Pro Pro Phe Ser Tyr Thr Cys Gly Asp Pro Ser Thr Tyr Arg		
1265	1270	1275
Val Thr Phe Pro Val Cys Pro Gln Lys Leu Ser Leu Ala Pro Pro Ser		
1285	1290	1295
Ala Lys Ala Ser Pro His Asn Pro Gly Ser Cys Gly Glu Pro Gln Ala		
1300	1305	1310
Lys Phe Leu Glu Ala Phe Phe Glu Glu Pro Pro Arg Arg Gln Ser Pro		
1315	1320	1325
Val Ser Asn Leu Gly Ser Glu Gly Glu Cys Pro Ser Ser Gly Ala Gly		
1330	1335	1340
Ser Gln Ala Gln Glu Leu Ala Glu Ala Trp Glu Gly Cys Arg Lys Asp		
1345	1350	1355
Leu Leu Phe Gln Lys Ser Pro Gln Asn His Arg Pro Pro Ser Val Ser		
1365	1370	1375
Asp Gln Thr Gly Glu Lys Glu Asn Cys Tyr Gln His Met Gly Thr Ser		
1380	1385	1390
Lys Ser Pro Ala Pro Gly Phe Ile His Leu Arg Thr Glu Cys Gly Pro		
1395	1400	1405
Arg Lys Glu Pro Cys Gln Glu Lys Ala Ala Leu Glu Arg Val Leu Arg		
1410	1415	1420
Gln Lys Gln Asp Ala Gln Gly Phe Thr Pro Pro Gln Leu Gly Ala Ser		
1425	1430	1435
Gln Gln Tyr Ala Ser Asp Phe His Asn Val Leu Lys Glu Glu Gln Glu		
1445	1450	1455
Ala Leu Cys Leu Asp Leu Trp Gly Thr Glu Arg Arg Glu Glu Arg Arg		
1460	1465	1470
Glu Pro Glu Pro His Ser Arg Gln Gly Gln Ala Leu Gly Val Lys Arg		
1475	1480	1485
Gly Cys Gln Leu His Glu Pro Ser Ser Ala Leu Cys Pro Ala Pro Ser		
1490	1495	1500
Ala Lys Val Ile Lys Met Pro Arg Gly Gly Pro Gln Gln Leu Gly Thr		
1505	1510	1515
Gly Ala Asn Thr Pro Ala Arg Val Phe Val Ala Leu Ser Asp Tyr Asn		
1525	1530	1535
Pro Leu Val Met Ser Ala Asn Leu Lys Ala Ala Glu Glu Glu Leu Val		
1540	1545	1550
Phe Gln Lys Arg Gln Leu Leu Arg Val Trp Gly Ser Gln Asp Thr His		
1555	1560	1565
Asp Phe Tyr Leu Ser Glu Cys Asn Arg Gln Val Gly Asn Ile Pro Gly		
1570	1575	1580
Arg Leu Val Ala Glu Met Glu Val Gly Thr Glu Gln Thr Asp Arg Arg		
1585	1590	1595
Trp Arg Ser Pro Ala Gln Gly His Leu Pro Ser Val Ala His Leu Glu		
1605	1610	1615
Asp Phe Gln Gly Leu Thr Ile Pro Gln Gly Ser Ser Leu Val Leu Gln		
1620	1625	1630
Gly Asn Ser Lys Arg Leu Pro Leu Trp Thr Pro Lys Ile Met Ile Ala		
1635	1640	1645
Ala Leu Asp Tyr Asp Pro Gly Asp Gly Gln Met Gly Gly Gln Gly Lys		
1650	1655	1660
Gly Arg Leu Ala Leu Arg Ala Gly Asp Val Val Met Val Tyr Gly Pro		
1665	1670	1675
Met Asp Asp Gln Gly Phe Tyr Tyr Gly Glu Leu Gly Gly His Arg Gly		
1685	1690	1695
Leu Val Pro Ala Asn Leu Arg Ile Lys Met Ser Ser Gln Gly His		
1700	1705	17101711

<210> 3466

<211> 371

<212> PRT

<213> Homo sapiens

<400> 3466

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Met Ser Lys Pro Pro Asp Leu Leu Leu Arg Leu Leu Arg Gly Ala Pro
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          20          25          30
Phe Val Ser Ile Met Ile Tyr Trp His Val Val Gly Glu Pro Lys Glu
          35          40          45
Lys Gly Gln Leu Tyr Asn Leu Pro Ala Glu Ile Pro Cys Pro Thr Leu
          50          55          60
Thr Pro Pro Thr Pro Pro Ser His Gly Pro Thr Pro Gly Asn Ile Phe
          65          70          75          80
Phe Leu Glu Thr Ser Asp Arg Thr Asn Pro Asn Phe Leu Phe Met Cys
          85          90          95
Ser Val Glu Ser Ala Ala Arg Thr His Pro Glu Ser His Val Leu Val
          100          105          110
Leu Met Lys Gly Leu Pro Gly Gly Asn Ala Ser Leu Pro Arg His Leu
          115          120          125
Gly Ile Ser Leu Leu Ser Cys Phe Pro Asn Val Gln Met Leu Pro Leu
          130          135          140
Asp Leu Arg Glu Leu Phe Arg Asp Thr Pro Leu Ala Asp Trp Tyr Ala
          145          150          155          160
Ala Val Gln Gly Arg Trp Glu Pro Tyr Leu Leu Pro Val Leu Ser Asp
          165          170          175
Ala Ser Arg Ile Ala Leu Met Trp Lys Phe Gly Gly Ile Tyr Leu Asp
          180          185          190
Thr Asp Phe Ile Val Leu Lys Asn Leu Arg Asn Leu Thr Asn Val Leu
          195          200          205
Gly Thr Gln Ser Arg Tyr Val Leu Asn Gly Ala Phe Leu Ala Phe Glu
          210          215          220
Arg Arg His Glu Phe Met Ala Leu Cys Met Arg Asp Phe Val Asp His
          225          230          235          240
Tyr Asn Gly Trp Ile Trp Gly His Gln Gly Pro Gln Leu Leu Thr Arg
          245          250          255
Val Phe Lys Lys Trp Cys Ser Ile Arg Ser Leu Ala Glu Ser Arg Ala
          260          265          270
Cys Arg Gly Val Thr Thr Leu Pro Pro Glu Ala Phe Tyr Pro Ile Pro
          275          280          285
Trp Gln Asp Trp Lys Lys Tyr Phe Glu Asp Ile Asn Pro Glu Glu Leu
          290          295          300
Pro Arg Leu Leu Ser Ala Thr Tyr Ala Val His Val Trp Asn Lys Lys
          305          310          315          320
Ser Gln Gly Thr Arg Phe Glu Ala Thr Ser Arg Ala Leu Leu Ala Gln
          325          330          335
Leu His Ala Arg Tyr Cys Pro Thr Thr His Glu Asp His Glu Asn Val
          340          345          350
Leu Val Lys Gly Pro Ala Gly His Leu Pro Asn Leu Leu Leu Met Gly
          355          360          365
His Trp
          370

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<210> 3467

<211> 725

<212> PRT

<213> Homo sapiens

<400> 3467

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Met Ala Lys Val Ile Leu Lys Gln Ser Lys Gln Cys Lys Asn Leu Leu

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20	25	30	
Tyr Phe Trp Trp Leu Ser Gly Leu Glu Ser Arg Arg Pro Ser Ser Pro			
35	40	45	
Leu Ile Asp Ile Lys Pro Ile Glu Phe Gly Val Leu Ser Ala Lys Lys			
50	55	60	
Glu Pro Ile Gln Pro Ser Val Leu Arg Arg Thr Tyr Asn Pro Asp Asp			
65	70	75	80
Tyr Phe Arg Lys Phe Glu Pro His Leu Tyr Ser Leu Asp Ser Asn Ser			
85	90	95	
Asp Asp Val Asp Ser Leu Thr Asp Glu Glu Ile Leu Ser Lys Tyr Gln			
100	105	110	
Leu Gly Met Leu His Phe Ser Thr Gln Tyr Asp Leu Leu His Asn His			
115	120	125	
Leu Thr Val Arg Val Ile Glu Ala Arg Asp Leu Pro Pro Pro Ile Ser			
130	135	140	
His Asp Gly Ser Arg Gln Asp Met Ala His Ser Asn Pro Tyr Val Lys			
145	150	155	160
Ile Cys Leu Leu Pro Asp Gln Lys Asn Ser Lys Gln Thr Gly Val Lys			
165	170	175	
Arg Lys Thr Gln Lys Pro Val Phe Glu Glu Arg Tyr Thr Phe Glu Ile			
180	185	190	
Pro Phe Leu Glu Ala Gln Arg Arg Thr Leu Leu Leu Thr Val Val Asp			
195	200	205	
Phe Asp Lys Phe Ser Arg His Cys Val Ile Gly Lys Val Ser Val Pro			
210	215	220	
Leu Cys Glu Val Asp Leu Val Lys Gly Gly His Trp Trp Lys Ala His			
225	230	235	240
Asp Ser Gln Phe Ser Ala Pro Gly Leu Pro Ala Asp Gln Gln Phe Phe			
245	250	255	
Ala Asp Leu Phe Ser Gly Leu Val Leu Asn Pro Gln Leu Leu Gly Arg			
260	265	270	
Val Trp Phe Ala Ser Gln Pro Ala Ser Leu Pro Val Gly Ser Leu Cys			
275	280	285	
Ile Asp Phe Pro Arg Leu Asp Ile Val Leu Arg Gly Glu Tyr Gly Asn			
290	295	300	
Leu Leu Glu Ala Lys Gln Gln Arg Leu Val Glu Gly Glu Met Leu Phe			
305	310	315	320
Ile Pro Ala Arg Ala Asn Leu Pro Val Asn Asn Lys Pro Val Met			
325	330	335	
Leu Leu Ser Leu Val Phe Ala Pro Thr Trp Leu Gly Leu Ser Phe Tyr			
340	345	350	
Asp Ser Arg Thr Thr Ser Leu Leu His Pro Ala Arg Gln Ile Gln Leu			
355	360	365	
Pro Ser Leu Gln Arg Gly Glu Gly Glu Ala Met Leu Ser Ala Leu Thr			
370	375	380	
Leu Phe Ser Arg Ser Pro Leu Glu Gln Asn Ile Ile Gln Pro Leu Val			
385	390	395	400
Leu Ser Leu Leu His Leu Cys Gly Ser Val Val Asn Met Pro Pro Gly			
405	410	415	
Asn Ser Gln Pro Arg Gly Asp Phe Leu Tyr His Ser Ile Cys Thr Trp			
420	425	430	
Val Gln Asp Asn Tyr Ala Gln Pro Leu Thr Arg Glu Ser Val Ala Gln			
435	440	445	
Phe Phe Asn Ile Thr Pro Asn His Leu Ser Lys Leu Phe Ala Gln His			
450	455	460	
Gly Thr Met Arg Phe Ile Glu Tyr Val Arg Trp Val Arg Met Ala Lys			
465	470	475	480
Ala Arg Met Ile Leu Gln Lys Tyr His Leu Ser Ile His Glu Val Ala			
485	490	495	
Gln Arg Cys Gly Phe Pro Asp Ser Asp Tyr Phe Cys Arg Val Phe Arg			
500	505	510	
Arg Gln Phe Gly Met Asp Tyr Val Asp Ile Leu Gln Ile His Arg Trp			

515 520 525
 Asp Tyr Asn Thr Pro Ile Glu Glu Thr Leu Glu Ala Leu Asn Asp Val
 530 535 540
 Val Lys Ala Gly Lys Ala Arg Tyr Ile Gly Ala Ser Ser Met His Ala
 545 550 555 560
 Ser Gln Phe Ala Gln Ala Leu Glu Leu Gln Lys Gln His Gly Trp Ala
 565 570 575
 Gln Phe Val Ser Met Gln Asp His Tyr Asn Leu Ile Tyr Arg Glu Glu
 580 585 590
 Glu Arg Glu Met Leu Pro Leu Cys Tyr Gln Glu Gly Val Ala Val Ile
 595 600 605
 Pro Trp Ser Pro Leu Ala Arg Gly Arg Leu Thr Arg Pro Trp Gly Glu
 610 615 620
 Thr Thr Ala Arg Leu Val Ser Asp Glu Val Gly Lys Asn Leu Tyr Lys
 625 630 635 640
 Glu Ser Asp Glu Asn Asp Ala Gln Ile Ala Glu Arg Leu Thr Gly Val
 645 650 655
 Ser Glu Glu Leu Gly Ala Thr Arg Ala Gln Val Ala Leu Ala Trp Leu
 660 665 670
 Leu Ser Lys Pro Gly Ile Ala Ala Pro Ile Ile Gly Thr Ser Arg Glu
 675 680 685
 Glu Gln Leu Asp Glu Leu Leu Asn Ala Val Asp Ile Thr Leu Lys Pro
 690 695 700
 Glu Gln Ile Ala Glu Leu Glu Thr Pro Tyr Lys Pro His Pro Val Val
 705 710 715 720
 Gly Phe Lys
 723

<210> 3468

<211> 1023

<212> PRT

<213> Homo sapiens

<400> 3468

Ala Leu Pro Leu Pro Leu Pro Thr Leu Tyr Pro Gly Met Ser Arg Arg
 1 5 10 15
 Lys Gln Arg Lys Pro Gln Gln Leu Ile Ser Asp Cys Glu Gly Pro Ser
 20 25 30
 Ala Ser Glu Asn Gly Asp Ala Ser Glu Glu Asp His Pro Gln Val Cys
 35 40 45
 Ala Lys Cys Cys Ala Gln Phe Thr Asp Pro Thr Glu Phe Leu Ala His
 50 55 60
 Gln Asn Ala Cys Ser Thr Asp Pro Pro Val Met Val Ile Ile Gly Gly
 65 70 75 80
 Gln Glu Asn Pro Asn Ser Ser Ala Ser Ser Glu Pro Arg Pro Glu
 85 90 95
 Gly His Asn Asn Pro Gln Val Met Asp Thr Glu His Ser Asn Pro Pro
 100 105 110
 Asp Ser Gly Ser Ser Val Pro Thr Asp Pro Thr Trp Gly Pro Glu Arg
 115 120 125
 Arg Gly Glu Glu Ser Ser Gly His Phe Leu Val Ala Ala Thr Gly Thr
 130 135 140
 Ala Ala Gly Gly Gly Gly Gly Leu Ile Leu Ala Ser Pro Lys Leu Gly
 145 150 155 160
 Ala Thr Pro Leu Pro Pro Glu Ser Thr Pro Ala Pro Pro Pro Pro
 165 170 175
 Pro Pro Pro Pro Pro Gly Val Gly Ser Gly His Leu Asn Ile Pro
 180 185 190
 Leu Ile Leu Glu Glu Leu Arg Val Leu Gln Gln Arg Gln Ile His Gln
 195 200 205
 Met Gln Met Thr Glu Gln Ile Cys Arg Gln Val Leu Leu Gly Ser

210	215	220
Leu Gly Gln Thr Val	Gly Ala Pro Ala Ser Pro Ser Glu Leu Pro Gly	
225	230	235
Thr Gly Thr Ala Ser	Thr Lys Pro Leu Leu Pro Leu Phe Ser Pro	240
	245	250
Ile Lys Pro Val Gln Thr	Ser Lys Thr Leu Ala Ser Ser Ser Ser Ser	255
	260	265
Ser Ser Ser Ser Ser	Gly Ala Glu Thr Pro Lys Gln Ala Phe Phe His	270
	275	280
Leu Tyr His Pro Leu	Gly Ser Gln His Pro Phe Ser Ala Gly Gly Val	285
	290	295
Gly Arg Ser His Lys	Pro Thr Pro Ala Pro Ser Pro Ala Leu Pro Gly	300
305	310	315
Ser Thr Asp Gln Leu	Ile Ala Ser Pro His Leu Ala Phe Pro Ser Thr	320
	325	330
Thr Gly Leu Leu Ala	Ala Gln Cys Leu Gly Ala Ala Arg Gly Leu Glu	335
	340	345
Ala Thr Ala Ser Pro	Gly Leu Leu Lys Pro Lys Asn Gly Ser Gly Glu	350
	355	360
Leu Ser Tyr Gly Glu	Val Met Gly Pro Leu Glu Lys Pro Gly Gly Arg	365
	370	375
His Lys Cys Arg Phe	Cys Ala Lys Val Phe Gly Ser Asp Ser Ala Leu	380
385	390	395
Gln Ile His Leu Arg	Ser His Thr Gly Glu Arg Pro Tyr Lys Cys Asn	400
	405	410
Val Cys Gly Asn Arg	Phe Thr Thr Arg Gly Asn Leu Lys Val His Phe	415
	420	425
His Arg His Arg Glu	Lys Tyr Pro His Val Gln Met Asn Pro His Pro	430
	435	440
Val Pro Glu His Leu	Asp Tyr Val Ile Thr Ser Ser Gly Leu Pro Tyr	445
	450	455
Gly Met Ser Val Pro	Pro Glu Lys Ala Glu Glu Glu Ala Ala Thr Pro	460
465	470	475
Gly Gly Gly Val Glu	Arg Lys Pro Leu Val Ala Ser Thr Thr Ala Leu	480
	485	490
Ser Ala Thr Glu Ser	Leu Thr Leu Leu Ser Thr Ser Ala Gly Thr Ala	495
	500	505
Thr Ala Pro Gly Leu	Pro Ala Phe Asn Lys Phe Val Leu Met Lys Ala	510
	515	520
Val Glu Pro Lys Asn	Lys Ala Asp Glu Asn Thr Pro Pro Gly Ser Glu	525
	530	535
Gly Ser Ala Ile Ser	Gly Val Ala Glu Ser Ser Thr Ala Thr Arg Met	540
545	550	555
Gln Leu Ser Lys Leu	Val Thr Ser Leu Pro Ser Trp Ala Leu Leu Thr	560
	565	570
Asn His Phe Lys Ser	Thr Gly Ser Phe Pro Leu Pro Leu Cys Ala Arg	575
	580	585
Ala Leu Gly Ala Ser	Pro Ser Glu Thr Ser Lys Leu Gln Gln Leu Val	590
	595	600
Glu Lys Ile Asp Arg	Gln Gly Ala Val Ala Val Thr Ser Ala Ala Ser	605
	610	615
Gly Ala Pro Thr Thr	Ser Ala Pro Ala Pro Ser Ser Ser Ala Ser Ser	620
	625	630
Gly Pro Asn Gln Cys	Val Ile Cys Leu Arg Val Leu Ser Cys Pro Arg	635
	645	650
Ala Leu Arg Leu His	Tyr Gly Gln His Gly Gly Glu Arg Pro Phe Lys	655
	660	665
Cys Lys Val Cys Gly	Arg Ala Phe Ser Thr Arg Gly Asn Leu Arg Ala	670
	675	680
His Phe Val Gly His	Lys Ala Ser Pro Ala Ala Arg Ala Gln Asn Ser	685
	690	695
Cys Pro Ile Cys Gln	Lys Lys Phe Thr Asn Ala Val Thr Leu Gln Gln	700
705	710	715
His Val Arg Met His	Leu Gly Gly Gln Ile Pro Asn Gly Gly Thr Ala	720

725 730 735
 Leu Pro Glu Gly Gly Gly Ala Ala Gln Glu Asn Gly Ser Glu Gln Ser
 740 745 750
 Thr Val Ser Gly Ala Gly Ser Phe Pro Gln Gln Gln Ser Gln Gln Pro
 755 760 765
 Ser Pro Glu Glu Glu Leu Ser Glu Glu Glu Glu Glu Glu Asp Glu Glu
 770 775 780
 Glu Glu Glu Asp Val Thr Asp Glu Asp Ser Leu Ala Gly Arg Gly Ser
 785 790 795 800
 Glu Ser Gly Gly Glu Lys Ala Ile Ser Val Arg Gly Asp Ser Glu Glu
 805 810 815
 Ala Ser Gly Ala Glu Glu Glu Val Gly Thr Val Ala Ala Ala Ala Thr
 820 825 830
 Ala Gly Lys Glu Met Asp Ser Asn Glu Lys Thr Thr Gln Gln Ser Ser
 835 840 845
 Leu Pro Pro Pro Pro Pro Pro Asp Ser Leu Asp Gln Pro Gln Pro Met
 850 855 860
 Glu Gln Gly Ser Ser Gly Val Leu Gly Gly Lys Glu Glu Gly Gly Lys
 865 870 875 880
 Pro Glu Arg Ser Ser Ser Pro Ala Ser Ala Leu Thr Pro Glu Gly Glu
 885 890 895
 Ala Thr Ser Val Thr Leu Val Glu Glu Leu Ser Leu Gln Glu Ala Met
 900 905 910
 Arg Lys Glu Pro Gly Glu Ser Ser Ser Arg Lys Ala Cys Glu Val Cys
 915 920 925
 Gly Gln Ala Phe Pro Ser Gln Ala Ala Leu Glu Glu His Gln Lys Thr
 930 935 940
 His Pro Lys Glu Gly Pro Leu Phe Thr Cys Val Phe Cys Arg Gln Gly
 945 950 955 960
 Phe Leu Glu Arg Ala Thr Leu Lys Lys His Met Leu Leu Ala His His
 965 970 975
 Gln Val Gln Pro Phe Ala Pro His Gly Pro Gln Asn Ile Ala Ala Leu
 980 985 990
 Ser Leu Val Pro Gly Cys Ser Pro Ser Ile Thr Ser Thr Gly Leu Ser
 995 1000 1005
 Pro Phe Pro Arg Lys Asp Asp Pro Thr Ile Pro
 1010 1015 1019

<210> 3469

<211> 1888

<212> PRT

<213> Homo sapiens

<400> 3469

Asn Leu Arg Pro Leu Ser Phe Ala Leu Phe Leu Gly Asp Pro Asn Met
 1 5 10 15
 Ala Asn Leu Glu Glu Ser Phe Pro Arg Gly Gly Thr Arg Lys Ile His
 20 25 30
 Lys Pro Glu Lys Ala Phe Gln Gln Ser Val Glu Gln Asp Asn Leu Phe
 35 40 45
 Asp Ile Ser Thr Glu Glu Gly Ser Thr Lys Arg Lys Lys Ser Gln Lys
 50 55 60
 Gly Pro Ala Lys Thr Lys Lys Leu Lys Ile Glu Lys Arg Glu Ser Ser
 65 70 75 80
 Lys Ser Ala Arg Glu Lys Phe Glu Ile Leu Ser Val Glu Ser Leu Cys
 85 90 95
 Glu Gly Met Arg Ile Leu Gly Cys Val Lys Glu Val Asn Glu Leu Glu
 100 105 110
 Leu Val Ile Ser Leu Pro Asn Gly Leu Gln Gly Phe Val Gln Val Thr
 115 120 125
 Glu Ile Cys Asp Ala Tyr Thr Lys Lys Leu Asn Glu Gln Val Thr Gln

130						135						140					
Glu	Gln	Pro	Leu	Lys	Asp	Leu	Leu	His	Leu	Pro	Glu	Leu	Phe	Ser	Pro		
145					150					155					160		
Gly	Met	Leu	Val	Arg	Cys	Val	Val	Ser	Ser	Leu	Gly	Ile	Thr	Asp	Arg		
				165						170					175		
Gly	Lys	Lys	Ser	Val	Lys	Leu	Ser	Leu	Asn	Pro	Lys	Asn	Val	Asn	Arg		
			180					185					190				
Val	Leu	Ser	Ala	Glu	Ala	Leu	Lys	Pro	Gly	Met	Leu	Leu	Thr	Gly	Thr		
		195					200					205					
Val	Ser	Ser	Leu	Glu	Asp	His	Gly	Tyr	Leu	Val	Asp	Ile	Gly	Val	Asp		
	210					215					220						
Gly	Thr	Arg	Ala	Phe	Leu	Pro	Leu	Leu	Lys	Ala	Gln	Glu	Tyr	Ile	Arg		
225					230					235					240		
Gln	Lys	Asn	Lys	Gly	Ala	Lys	Leu	Lys	Val	Gly	Gln	Tyr	Leu	Asn	Cys		
			245					250					255				
Ile	Val	Glu	Lys	Val	Lys	Gly	Asn	Gly	Gly	Val	Val	Ser	Leu	Ser	Val		
		260					265					270					
Gly	His	Ser	Glu	Val	Ser	Thr	Ala	Ile	Ala	Thr	Glu	Gln	Gln	Ser	Trp		
	275					280					285						
Asn	Leu	Asn	Asn	Leu	Leu	Pro	Gly	Leu	Val	Val	Lys	Ala	Gln	Val	Gln		
	290					295					300						
Lys	Val	Thr	Pro	Phe	Gly	Leu	Thr	Leu	Asn	Phe	Leu	Thr	Phe	Phe	Thr		
305				310					315						320		
Gly	Val	Val	Asp	Phe	Met	His	Leu	Asp	Pro	Lys	Lys	Ala	Gly	Thr	Tyr		
			325					330					335				
Phe	Ser	Asn	Gln	Ala	Val	Arg	Ala	Cys	Ile	Leu	Cys	Val	His	Pro	Arg		
		340					345					350					
Thr	Arg	Val	His	Leu	Ser	Leu	Arg	Pro	Ile	Phe	Leu	Gln	Pro	Gly			
	355					360					365						
Arg	Pro	Leu	Thr	Arg	Leu	Ser	Cys	Gln	Asn	Leu	Gly	Ala	Val	Leu	Asp		
	370					375					380						
Asp	Val	Pro	Val	Gln	Gly	Phe	Phe	Lys	Lys	Ala	Gly	Ala	Thr	Phe	Arg		
385				390					395						400		
Leu	Lys	Asp	Gly	Val	Leu	Ala	Tyr	Ala	Arg	Leu	Ser	His	Leu	Ser	Asp		
			405					410					415				
Ser	Lys	Asn	Val	Phe	Asn	Pro	Glu	Ala	Phe	Lys	Pro	Gly	Asn	Thr	His		
		420					425					430					
Lys	Cys	Arg	Ile	Ile	Asp	Tyr	Ser	Gln	Met	Asp	Glu	Leu	Ala	Leu	Leu		
	435					440					445						
Ser	Leu	Arg	Thr	Ser	Ile	Ile	Glu	Ala	Gln	Tyr	Leu	Arg	Tyr	His	Asp		
	450					455					460						
Ile	Glu	Pro	Gly	Ala	Val	Val	Lys	Gly	Thr	Val	Leu	Thr	Ile	Lys	Ser		
465				470					475						480		
Tyr	Gly	Met	Leu	Val	Lys	Val	Gly	Glu	Gln	Met	Arg	Gly	Leu	Val	Pro		
		485						490					495				
Pro	Met	His	Leu	Ala	Asp	Ile	Leu	Met	Lys	Asn	Pro	Glu	Lys	Lys	Tyr		
		500					505					510					
His	Ile	Gly	Asp	Glu	Val	Lys	Cys	Arg	Val	Leu	Leu	Cys	Asp	Pro	Glu		
	515					520						525					
Ala	Lys	Lys	Leu	Met	Met	Thr	Leu	Lys	Lys	Thr	Leu	Ile	Glu	Ser	Lys		
	530					535					540						
Leu	Pro	Val	Ile	Thr	Cys	Tyr	Ala	Asp	Ala	Lys	Pro	Gly	Leu	Gln	Thr		
545				550					555						560		
His	Gly	Phe	Ile	Ile	Arg	Val	Lys	Asp	Tyr	Gly	Cys	Ile	Val	Lys	Phe		
		565						570					575				
Tyr	Asn	Asn	Val	Gln	Gly	Leu	Val	Pro	Lys	His	Glu	Leu	Ser	Thr	Glu		
		580					585					590					
Tyr	Ile	Pro	Asp	Pro	Glu	Arg	Val	Phe	Tyr	Thr	Gly	Gln	Val	Val	Lys		
	595					600					605						
Val	Val	Val	Leu	Asn	Cys	Glu	Pro	Ser	Lys	Glu	Arg	Met	Leu	Leu	Ser		
	610					615					620						
Phe	Lys	Leu	Ser	Ser	Asp	Pro	Glu	Pro	Lys	Lys	Glu	Pro	Ala	Gly	His		
625				630					635						640		
Ser	Gln	Lys	Lys	Gly	Lys	Ala	Ile	Asn	Ile	Gly	Gln	Leu	Val	Asp	Val		

5183

1155	1160	1165
Cys Phe Leu Lys Lys Tyr Asn Val Val Lys Lys Trp Leu Glu Val Glu		
1170	1175	1180
Ile Ala Pro Asp Ile Arg Gly Arg Ile Pro Leu Leu Thr Ser Leu		
1185	1190	1195
Ser Phe Lys Val Leu Lys His Pro Asp Lys Lys Phe Arg Val Gly Gln		1200
1205	1210	1215
Ala Leu Arg Ala Thr Val Val Gly Pro Asp Ser Ser Lys Thr Phe Leu		
1220	1225	1230
Cys Leu Ser Leu Thr Gly Pro His Lys Leu Glu Glu Gly Glu Val Ala		
1235	1240	1245
Met Gly Arg Val Val Lys Val Thr Pro Asn Glu Gly Leu Thr Val Ser		
1250	1255	1260
Phe Pro Phe Gly Lys Ile Gly Thr Val Ser Ile Phe His Met Ser Asp		
1265	1270	1275
Ser Tyr Ser Glu Thr Pro Leu Glu Asp Phe Val Pro Gln Lys Val Val		1280
1285	1290	1295
Arg Cys Tyr Ile Leu Ser Thr Ala Asp Asn Val Leu Thr Leu Ser Leu		
1300	1305	1310
Arg Ser Ser Arg Thr Asn Pro Glu Thr Lys Ser Lys Val Glu Asp Pro		
1315	1320	1325
Glu Ile Asn Ser Ile Gln Asp Ile Lys Glu Gly Gln Leu Leu Arg Gly		
1330	1335	1340
Tyr Val Gly Ser Ile Gln Pro His Gly Val Phe Phe Arg Leu Gly Pro		
1345	1350	1355
Ser Val Val Gly Leu Ala Arg Tyr Ser His Val Ser Gln His Ser Pro		1360
1365	1370	1375
Ser Lys Lys Ala Leu Tyr Asn Lys His Leu Pro Glu Gly Lys Leu Leu		
1380	1385	1390
Thr Ala Arg Val Leu Arg Leu Asn His Gln Lys Asn Leu Val Glu Leu		
1395	1400	1405
Ser Phe Leu Pro Gly Asp Thr Gly Lys Pro Asp Val Leu Ser Ala Ser		
1410	1415	1420
Leu Glu Gly Gln Leu Thr Lys Gln Glu Glu Arg Lys Thr Glu Ala Glu		
1425	1430	1435
Glu Arg Asp Gln Lys Gly Glu Lys Lys Asn Gln Lys Arg Asn Glu Lys		1440
1445	1450	1455
Lys Asn Gln Lys Gly Gln Glu Glu Val Glu Met Pro Ser Lys Glu Lys		
1460	1465	1470
Gln Gln Pro Gln Lys Pro Gln Ala Gln Lys Arg Gly Gly Arg Glu Cys		
1475	1480	1485
Arg Glu Ser Gly Ser Glu Gln Glu Arg Val Ser Lys Lys Pro Lys Lys		
1490	1495	1500
Ala Gly Leu Ser Glu Glu Asp Asp Ser Leu Val Asp Val Tyr Tyr Arg		
1505	1510	1515
Glu Gly Lys Glu Glu Ala Glu Glu Thr Asn Val Leu Pro Lys Glu Lys		1520
1525	1530	1535
Gln Thr Lys Pro Ala Glu Ala Pro Arg Leu Gln Leu Ser Ser Gly Phe		
1540	1545	1550
Ala Trp Asn Val Gly Leu Asp Ser Leu Thr Pro Ala Leu Pro Pro Leu		
1555	1560	1565
Ala Glu Ser Ser Asp Ser Glu Glu Asp Glu Lys Pro His Gln Ala Thr		
1570	1575	1580
Ile Lys Lys Ser Lys Lys Glu Arg Glu Leu Glu Lys Gln Lys Ala Glu		
1585	1590	1595
Lys Glu Leu Ser Arg Thr Glu Glu Ala Leu Met Asp Pro Gly Arg Gln		1600
1605	1610	1615
Pro Glu Ser Ala Asp Asp Phe Asp Arg Leu Val Leu Ser Ser Pro Asn		
1620	1625	1630
Ser Ser Ile Leu Trp Leu Gln Tyr Met Ala Phe His Leu Gln Ala Thr		
1635	1640	1645
Glu Ile Glu Lys Ala Arg Ala Val Ala Glu Arg Ala Leu Lys Thr Ile		
1650	1655	1660
Ser Phe Arg Glu Glu Gln Glu Lys Leu Asn Val Trp Val Ala Leu Leu		

1665 1670 1675 1680
 Asn Leu Glu Asn Met Tyr Gly Ser Gln Glu Ser Leu Thr Lys Val Phe
 1685 1690 1695
 Glu Arg Ala Val Gln Tyr Asn Glu Pro Leu Lys Val Phe Leu His Leu
 1700 1705 1710
 Ala Asp Ile Tyr Ala Lys Ser Glu Lys Phe Gln Glu Ala Gly Glu Leu
 1715 1720 1725
 Tyr Asn Arg Met Leu Lys Arg Phe Arg Gln Glu Lys Ala Val Trp Ile
 1730 1735 1740
 Lys Tyr Gly Ala Phe Leu Leu Arg Arg Ser Gln Ala Ala Ala Ser His
 1745 1750 1755 1760
 Arg Val Leu Gln Arg Ala Leu Glu Cys Leu Pro Ser Lys Glu His Val
 1765 1770 1775
 Asp Val Ile Ala Lys Phe Ala Gln Leu Glu Phe Gln Leu Gly Asp Ala
 1780 1785 1790
 Glu Arg Ala Lys Ala Ile Phe Glu Asn Thr Leu Ser Thr Tyr Pro Lys
 1795 1800 1805
 Arg Thr Asp Val Trp Ser Val Tyr Ile Asp Met Thr Ile Lys His Gly
 1810 1815 1820
 Ser Gln Lys Asp Val Arg Asp Ile Phe Glu Arg Val Ile His Leu Ser
 1825 1830 1835 1840
 Leu Ala Pro Lys Arg Met Lys Phe Phe Phe Lys Arg Tyr Leu Asp Tyr
 1845 1850 1855
 Glu Lys Gln His Gly Thr Glu Lys Asp Val Gln Ala Val Lys Ala Lys
 1860 1865 1870
 Ala Leu Glu Tyr Val Glu Ala Lys Ser Ser Val Leu Glu Asp
 1875 1880 18851886

<210> 3470
 <211> 371
 <212> PRT
 <213> Homo sapiens

<400> 3470
 Thr Ala Ala Ala Pro Val Ala Pro Gly Thr Met Asp Asp Ala Thr Val
 1 5 10 15
 Leu Arg Lys Lys Gly Tyr Ile Val Gly Ile Asn Leu Gly Lys Gly Ser
 20 25 30
 Tyr Ala Lys Val Lys Ser Ala Tyr Ser Glu Arg Leu Lys Phe Asn Val
 35 40 45
 Ala Val Lys Ile Ile Ala Arg Lys Lys Thr Pro Thr Asp Phe Val Glu
 50 55 60
 Arg Phe Leu Pro Arg Glu Met Asp Ile Leu Ala Thr Val Asn His Gly
 65 70 75 80
 Ser Ile Ile Lys Thr Tyr Glu Ile Phe Glu Thr Ser Asp Gly Arg Ile
 85 90 95
 Tyr Ile Ile Met Glu Leu Gly Val Gln Gly Asp Leu Leu Glu Phe Ile
 100 105 110
 Lys Cys Gln Gly Ala Leu His Glu Asp Val Ala Arg Lys Met Phe Arg
 115 120 125
 Gln Leu Ser Ser Ala Val Lys Tyr Cys His Asp Leu Asp Ile Val His
 130 135 140
 Arg Asp Leu Lys Cys Glu Asn Leu Leu Leu Asp Lys Asp Phe Asn Ile
 145 150 155 160
 Lys Leu Ser Asp Phe Gly Phe Ser Lys Arg Cys Leu Arg Asp Ser Asn
 165 170 175
 Gly Arg Ile Ile Leu Ser Lys Thr Phe Cys Gly Ser Ala Ala Tyr Ala
 180 185 190
 Ala Pro Glu Val Leu Gln Ser Ile Pro Tyr Gln Pro Lys Val Tyr Asp
 195 200 205
 Ile Trp Ser Leu Gly Val Ile Leu Tyr Ile Met Val Cys Gly Ser Met

210	215	220
Pro Tyr Asp Asp Ser Asp Ile Arg Lys Met Leu Arg Ile Gln Lys Glu		
225	230	235
His Arg Val Asp Phe Pro Arg Ser Lys Asn Leu Thr Cys Glu Cys Lys		240
	245	250
Asp Leu Ile Tyr Arg Met Leu Gln Pro Asp Val Ser Lys Arg Leu His		255
	260	265
Ile Asp Glu Ile Leu Ser His Ser Trp Leu Gln Pro Pro Lys Pro Lys		270
	275	280
Ala Thr Ser Ser Ala Ser Phe Lys Arg Glu Gly Glu Gly Lys Tyr Arg		285
	290	295
Ala Glu Cys Lys Leu Asp Thr Lys Thr Gly Leu Arg Pro Asp His Arg		300
305	310	315
Pro Asp His Lys Leu Gly Ala Lys Thr Gln His Arg Leu Leu Val Val		320
	325	330
Pro Glu Asn Glu Asn Arg Met Glu Asp Arg Leu Ala Glu Thr Ser Arg		335
	340	345
Ala Lys Asp His His Ile Ser Gly Ala Glu Val Gly Lys Ala Ser Thr		350
	355	360
		365
		368

<210> 3471
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 3471

Thr Glu Arg Gly Ala Pro Gln His Pro Thr Leu Pro Leu Pro Ser Leu		
1	5	10
Thr Pro Ser Ser Val His Thr Gly Gln Pro Lys Thr Thr Pro Ser Val		15
	20	25
Ile Leu Phe Leu Pro Ser Cys Glu Glu Pro Gln Ala Asn Lys Ala Thr		30
	35	40
Leu Val Cys Leu Met Asn Asn Phe Tyr Pro Gly Ile Leu Met Val Thr		45
	50	55
Trp Lys Ala Asp Gly Thr Leu Ile Thr Gln Ser Val Glu Lys Thr Thr		60
65	70	75
Pro Ser Lys Gln Ser Asn Asn Lys Tyr Val Ala Ser Ser Tyr Leu Ser		80
	85	90
Leu Thr Pro Glu Gln Trp Arg Ser Arg Arg Ser Tyr Ser Cys Gln Val		95
	100	105
Met Gln Glu Gly Ser Thr Val Glu Lys Ser Val Ala Pro Ala Glu Cys		110
	115	120
		125
Ser		
129		

<210> 3472
 <211> 759
 <212> PRT
 <213> Homo sapiens

<400> 3472

Asp Lys Pro Thr Arg His Lys Thr Tyr Leu Ser Ser Ser Trp Ala Lys		
1	5	10
Met Ala Ala Ala Glu Gly Pro Val Gly Asp Gly Glu Leu Trp Gln Thr		15
	20	25
Trp Leu Pro Asn His Val Val Phe Leu Arg Leu Arg Glu Gly Leu Lys		30

35	40	45
Asn Gln Ser Pro Thr Glu Ala Glu Lys Pro Ala Ser Ser Ser Leu Pro		
50	55	60
Ser Ser Pro Pro Pro Gln Leu Leu Thr Arg Asn Val Val Phe Gly Leu		
65	70	75
Gly Gly Glu Leu Phe Leu Trp Asp Gly Glu Asp Ser Ser Phe Leu Val		
85	90	95
Val Arg Leu Arg Gly Pro Ser Gly Gly Gly Glu Glu Pro Ala Leu Ser		
100	105	110
Gln Tyr Gln Arg Leu Leu Cys Ile Asn Pro Pro Leu Phe Glu Ile Tyr		
115	120	125
Gln Val Leu Leu Ser Pro Thr Gln His His Val Ala Leu Ile Gly Ile		
130	135	140
Lys Gly Leu Met Val Leu Glu Leu Pro Lys Arg Trp Gly Lys Asn Ser		
145	150	155
Glu Phe Glu Gly Gly Lys Ser Thr Val Asn Cys Ser Thr Thr Pro Val		
165	170	175
Ala Glu Arg Phe Phe Thr Ser Ser Thr Ser Leu Thr Leu Lys His Ala		
180	185	190
Ala Trp Tyr Pro Ser Glu Ile Leu Asp Pro His Val Val Leu Leu Thr		
195	200	205
Ser Asp Asn Val Ile Arg Ile Tyr Ser Leu Arg Glu Pro Gln Thr Pro		
210	215	220
Thr Asn Val Ile Ile Leu Ser Glu Ala Glu Glu Glu Ser Leu Val Leu		
225	230	235
Asn Lys Gly Arg Ala Tyr Thr Ala Ser Leu Gly Glu Thr Ala Val Ala		
245	250	255
Phe Asp Phe Gly Pro Leu Ala Ala Val Pro Lys Thr Leu Phe Gly Gln		
260	265	270
Asn Gly Lys Asp Glu Val Val Ala Tyr Pro Leu Tyr Ile Leu Tyr Glu		
275	280	285
Asn Gly Glu Thr Phe Leu Thr Tyr Ile Ser Leu Leu His Ser Pro Gly		
290	295	300
Asn Ile Trp Lys Ala Val Gly Ser Ile Ala His Ala Ser Ala Ala Glu		
305	310	315
Asp Asn Tyr Gly Tyr Asp Ala Cys Ala Val Leu Cys Leu Pro Cys Val		
325	330	335
Pro Asn Ile Leu Val Ile Ala Thr Glu Ser Gly Met Leu Tyr His Cys		
340	345	350
Val Val Leu Glu Gly Glu Glu Glu Asp Asp His Thr Ser Glu Lys Ser		
355	360	365
Trp Asp Ser Arg Ile Asp Leu Ile Pro Ser Leu Tyr Val Phe Glu Cys		
370	375	380
Val Glu Leu Glu Leu Ala Leu Lys Leu Ala Ser Gly Glu Asp Asp Pro		
385	390	395
Phe Asp Ser Asp Phe Ser Cys Pro Val Lys Leu His Arg Asp Pro Lys		
405	410	415
Cys Pro Ser Arg Tyr His Cys Thr His Glu Ala Gly Val His Ser Val		
420	425	430
Gly Leu Thr Trp Ile His Lys Leu His Lys Phe Leu Gly Ser Asp Glu		
435	440	445
Glu Asp Lys Asp Ser Leu Gln Glu Leu Ser Thr Glu Gln Lys Cys Phe		
450	455	460
Val Glu His Ile Leu Cys Thr Lys Pro Leu Pro Cys Arg Gln Pro Ala		
465	470	475
Pro Ile Arg Gly Phe Trp Ile Val Pro Asp Ile Leu Gly Pro Thr Met		
485	490	495
Ile Cys Ile Thr Ser Thr Tyr Glu Cys Leu Ile Trp Pro Leu Leu Ser		
500	505	510
Thr Val His Pro Ala Ser Pro Pro Leu Leu Cys Thr Arg Glu Asp Val		
515	520	525
Glu Val Ala Glu Ser Pro Leu Arg Val Leu Ala Glu Thr Pro Asp Ser		
530	535	540
Phe Glu Lys His Ile Arg Ser Ile Leu Gln Arg Ser Val Ala Asn Pro		

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545          550          555          560
Ala Phe Leu Lys Ala Ser Glu Lys Asp Ile Ala Pro Pro Pro Glu Glu
          565          570          575
Cys Leu Gln Leu Leu Ser Arg Ala Thr Gln Val Phe Arg Glu Gln Tyr
          580          585          590
Ile Leu Lys Gln Asp Leu Ala Lys Glu Glu Ile Gln Arg Arg Val Lys
          595          600          605
Leu Leu Cys Asp Gln Lys Lys Lys Gln Leu Glu Asp Leu Ser Tyr Cys
          610          615          620
Arg Glu Glu Arg Lys Ser Leu Arg Glu Met Ala Glu Arg Leu Ala Asp
          625          630          635
Lys Tyr Glu Glu Ala Lys Glu Lys Gln Glu Asp Ile Met Asn Arg Met
          645          650          655
Lys Lys Leu Leu His Ser Phe His Ser Glu Leu Pro Val Leu Ser Asp
          660          665          670
Ser Glu Arg Asp Met Lys Lys Glu Leu Gln Leu Ile Pro Asp Gln Leu
          675          680          685
Arg His Leu Gly Asn Ala Ile Lys Gln Val Thr Met Lys Lys Asp Tyr
          690          695          700
Gln Gln Gln Lys Met Glu Lys Val Leu Ser Leu Pro Lys Pro Thr Ile
          705          710          715
Ile Leu Ser Ala Tyr Gln Arg Lys Cys Ile Gln Ser Ile Leu Lys Glu
          725          730          735
Glu Gly Glu His Ile Arg Glu Met Val Lys Gln Ile Asn Asp Ile Arg
          740          745          750
Asn His Val Asn Phe
          755          757

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<210> 3473
<211> 759
<212> PRT
<213> Homo sapiens

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          <400> 3473
Asp Lys Pro Thr Arg His Lys Thr Tyr Leu Ser Ser Ser Trp Ala Lys
  1          5          10          15
Met Ala Ala Ala Glu Gly Pro Val Gly Asp Gly Glu Leu Trp Gln Thr
          20          25          30
Trp Leu Pro Asn His Val Val Phe Leu Arg Leu Arg Glu Gly Leu Lys
          35          40          45
Asn Gln Ser Pro Thr Glu Ala Glu Lys Pro Ala Ser Ser Ser Leu Pro
          50          55          60
Ser Ser Pro Pro Pro Gln Leu Leu Thr Arg Asn Val Val Phe Gly Leu
          65          70          75
Gly Gly Glu Leu Phe Leu Trp Asp Gly Glu Asp Ser Ser Phe Leu Val
          85          90          95
Val Arg Leu Arg Gly Pro Ser Gly Gly Gly Glu Glu Pro Ala Leu Ser
          100          105          110
Gln Tyr Gln Arg Leu Leu Cys Ile Asn Pro Pro Leu Phe Glu Ile Tyr
          115          120          125
Gln Val Leu Leu Ser Pro Thr Gln His His Val Ala Leu Ile Gly Ile
          130          135          140
Lys Gly Leu Met Val Leu Glu Leu Pro Lys Arg Trp Gly Lys Asn Ser
          145          150          155
Glu Phe Glu Gly Gly Lys Ser Thr Val Asn Cys Ser Thr Thr Pro Val
          165          170          175
Ala Glu Arg Phe Phe Thr Ser Ser Thr Ser Leu Thr Leu Lys His Ala
          180          185          190
Ala Trp Tyr Pro Ser Glu Ile Leu Asp Pro His Val Val Leu Leu Thr
          195          200          205
Ser Asp Asn Val Ile Arg Ile Tyr Ser Leu Arg Glu Pro Gln Thr Pro

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210	215	220
Thr Asn Val Ile Ile Leu Ser Glu Ala Glu Glu Glu Ser Leu Val Leu		
225	230	235
Asn Lys Gly Arg Ala Tyr Thr Ala Ser Leu Gly Glu Thr Ala Val Ala		
	245	250
Phe Asp Phe Gly Pro Leu Ala Ala Val Pro Lys Thr Leu Phe Gly Gln		
	260	265
Asn Gly Lys Asp Glu Val Val Ala Tyr Pro Leu Tyr Ile Leu Tyr Glu		
	275	280
Asn Gly Glu Thr Phe Leu Thr Tyr Ile Ser Leu Leu His Ser Pro Gly		
	290	295
Asn Ile Trp Lys Ala Val Gly Ser Ile Ala His Ala Ser Ala Ala Glu		
305	310	315
Asp Asn Tyr Gly Tyr Asp Ala Cys Ala Val Leu Cys Leu Pro Cys Val		
	325	330
Pro Asn Ile Leu Val Ile Ala Thr Glu Ser Gly Met Leu Tyr His Cys		
	340	345
Val Val Leu Glu Gly Glu Glu Glu Asp Asp His Thr Ser Glu Lys Ser		
	355	360
Trp Asp Ser Arg Ile Asp Leu Ile Pro Ser Leu Tyr Val Phe Glu Cys		
	370	375
Val Glu Leu Glu Leu Ala Leu Lys Leu Ala Ser Gly Glu Asp Asp Pro		
385	390	395
Phe Asp Ser Asp Phe Ser Cys Pro Val Lys Leu His Arg Asp Pro Lys		
	405	410
Cys Pro Ser Arg Tyr His Cys Thr His Glu Ala Gly Val His Ser Val		
	420	425
Gly Leu Thr Trp Ile His Lys Leu His Lys Phe Leu Gly Ser Asp Glu		
	435	440
Glu Asp Lys Asp Ser Leu Gln Glu Leu Ser Thr Glu Gln Lys Cys Phe		
	450	455
Val Glu His Ile Leu Cys Thr Lys Pro Leu Pro Cys Arg Gln Pro Ala		
465	470	475
Pro Ile Arg Gly Phe Trp Ile Val Pro Asp Ile Leu Gly Pro Thr Met		
	485	490
Ile Cys Ile Thr Ser Thr Tyr Glu Cys Leu Ile Trp Pro Leu Leu Ser		
	500	505
Thr Val His Pro Ala Ser Pro Pro Leu Leu Cys Thr Arg Glu Asp Val		
	515	520
Glu Val Ala Glu Ser Pro Leu Arg Val Leu Ala Glu Thr Pro Asp Ser		
	530	535
Phe Glu Lys His Ile Arg Ser Ile Leu Gln Arg Ser Val Ala Asn Pro		
545	550	555
Ala Phe Leu Lys Ala Ser Glu Lys Asp Ile Ala Pro Pro Pro Glu Glu		
	565	570
Cys Leu Gln Leu Leu Ser Arg Ala Thr Gln Val Phe Arg Glu Gln Tyr		
	580	585
Ile Leu Lys Gln Asp Leu Ala Lys Glu Glu Ile Gln Arg Arg Val Lys		
	595	600
Leu Leu Cys Asp Gln Lys Lys Lys Gln Leu Glu Asp Leu Ser Tyr Cys		
	610	615
Arg Glu Glu Arg Lys Ser Leu Arg Glu Met Ala Glu Arg Leu Ala Asp		
625	630	635
Lys Tyr Glu Glu Ala Lys Glu Lys Gln Glu Asp Ile Met Asn Arg Met		
	645	650
Lys Lys Leu Leu His Ser Phe His Ser Glu Leu Pro Val Leu Ser Asp		
	660	665
Ser Glu Arg Asp Met Lys Lys Glu Leu Gln Leu Ile Pro Asp Gln Leu		
	675	680
Arg His Leu Gly Asn Ala Ile Lys Gln Val Thr Met Lys Lys Asp Tyr		
	690	695
Gln Gln Gln Lys Met Glu Lys Val Leu Ser Leu Pro Lys Pro Thr Ile		
705	710	715
Ile Leu Ser Ala Tyr Gln Arg Lys Cys Ile Gln Ser Ile Leu Lys Glu		

				725					730				735
Glu	Gly	Glu	His	Ile	Arg	Glu	Met	Val	Lys	Gln	Ile	Asn	Asp
			740					745					750
Asn	His	Val	Asn	Phe									
		755		757									

<210> 3474
 <211> 599
 <212> PRT
 <213> Homo sapiens

<400> 3474

Asp	Arg	Arg	Arg	Glu	Pro	Glu	Arg	His	Val	Arg	Val	Lys	Gln	Arg	Thr
1				5					10					15	
Ser	Val	Leu	Asn	Met	Leu	Arg	Arg	Leu	Asp	Lys	Ile	Arg	Phe	Arg	Gly
		20						25					30		
His	Lys	Arg	Asp	Asp	Phe	Leu	Asp	Leu	Ala	Glu	Ser	Pro	Asn	Ala	Ser
	35					40						45			
Asp	Thr	Glu	Cys	Ser	Asp	Glu	Ile	Pro	Leu	Lys	Val	Pro	Arg	Thr	Ser
	50					55					60				
Pro	Arg	Asp	Ser	Glu	Glu	Leu	Arg	Asp	Pro	Ala	Gly	Pro	Gly	Thr	Leu
	65			70						75				80	
Ile	Met	Ala	Thr	Gly	Val	Gln	Asp	Phe	Asn	Arg	Thr	Glu	Phe	Asp	Arg
				85					90					95	
Leu	Asn	Glu	Ile	Lys	Gly	His	Leu	Glu	Ile	Ala	Leu	Leu	Glu	Lys	His
		100					105						110		
Phe	Leu	Gln	Glu	Glu	Leu	Arg	Lys	Leu	Arg	Glu	Glu	Thr	Asn	Ala	Glu
	115						120					125			
Met	Leu	Arg	Gln	Glu	Leu	Asp	Arg	Glu	Arg	Gln	Arg	Arg	Met	Glu	Leu
	130					135					140				
Glu	Gln	Lys	Val	Gln	Glu	Val	Leu	Lys	Ala	Arg	Thr	Glu	Glu	Gln	Met
	145				150					155				160	
Ala	Gln	Gln	Pro	Pro	Lys	Gly	Gln	Ala	Gln	Ala	Ser	Asn	Gly	Ala	Glu
			165					170						175	
Arg	Arg	Ser	Gln	Gly	Leu	Ser	Ser	Arg	Leu	Gln	Lys	Trp	Phe	Tyr	Glu
		180						185					190		
Arg	Phe	Gly	Glu	Tyr	Val	Glu	Asp	Phe	Arg	Phe	Gln	Pro	Glu	Glu	Asn
	195					200						205			
Thr	Val	Glu	Thr	Glu	Glu	Pro	Leu	Ser	Ala	Arg	Arg	Leu	Thr	Glu	Asn
	210					215					220				
Met	Arg	Arg	Leu	Lys	Arg	Gly	Ala	Lys	Pro	Val	Thr	Asn	Phe	Val	Lys
	225				230					235				240	
Asn	Leu	Ser	Ala	Leu	Ser	Asp	Trp	Tyr	Ser	Val	Tyr	Thr	Ser	Ala	Ile
			245						250					255	
Ala	Phe	Thr	Val	Tyr	Met	Asn	Ala	Val	Trp	His	Gly	Trp	Ala	Ile	Pro
		260						265					270		
Leu	Phe	Leu	Phe	Leu	Ala	Ile	Leu	Arg	Leu	Ser	Leu	Asn	Tyr	Leu	Ile
	275						280					285			
Ala	Arg	Gly	Trp	Arg	Ile	Gln	Trp	Ser	Ile	Val	Pro	Glu	Val	Ser	Glu
	290					295					300				
Pro	Val	Glu	Pro	Pro	Lys	Glu	Asp	Leu	Thr	Val	Ser	Glu	Lys	Phe	Gln
	305				310					315				320	
Leu	Val	Leu	Asp	Val	Ala	Gln	Lys	Ala	Gln	Asn	Leu	Phe	Gly	Lys	Met
			325						330					335	
Ala	Asp	Ile	Leu	Glu	Lys	Ile	Lys	Asn	Leu	Phe	Met	Trp	Val	Gln	Pro
		340						345					350		
Glu	Ile	Thr	Gln	Lys	Leu	Tyr	Val	Ala	Leu	Trp	Ala	Ala	Phe	Leu	Ala
	355					360						365			
Ser	Cys	Phe	Phe	Pro	Tyr	Arg	Leu	Val	Gly	Leu	Ala	Val	Gly	Leu	Tyr
	370					375					380				
Ala	Gly	Ile	Lys	Phe	Phe	Leu	Ile	Asp	Phe	Ile	Phe	Lys	Arg	Cys	Pro

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385          390          395          400
Arg Leu Arg Ala Lys Tyr Asp Thr Pro Tyr Ile Ile Trp Arg Ser Leu
          405          410          415
Pro Thr Asp Pro Gln Leu Lys Glu Arg Ser Ser Ala Ala Val Ser Arg
          420          425          430
Arg Leu Gln Thr Thr Ser Ser Arg Ser Tyr Val Pro Ser Ala Pro Ala
          435          440          445
Gly Leu Gly Lys Glu Glu Asp Ala Gly Arg Phe His Ser Thr Lys Lys
          450          455          460
Gly Asn Phe His Glu Ile Phe Asn Leu Thr Glu Asn Glu Arg Pro Leu
465          470          475          480
Ala Val Cys Glu Asn Gly Trp Arg Cys Cys Leu Ile Asn Arg Asp Arg
          485          490          495
Lys Met Pro Thr Asp Tyr Ile Arg Asn Gly Val Leu Tyr Val Thr Glu
          500          505          510
Asn Tyr Leu Cys Phe Glu Ser Ser Lys Ser Gly Ser Ser Lys Arg Asn
          515          520          525
Lys Val Ile Lys Leu Val Asp Ile Thr Asp Ile Gln Lys Tyr Lys Val
530          535          540
Leu Ser Val Leu Pro Gly Ser Gly Met Gly Ile Ala Val Ser Thr Pro
545          550          555          560
Ser Thr Gln Lys Pro Leu Val Phe Gly Ala Met Val His Arg Asp Glu
          565          570          575
Ala Phe Glu Thr Ile Leu Ser Gln Tyr Ile Lys Ile Thr Ser Ala Ala
          580          585          590
Ala Ser Gly Gly Asp Ser
          595          598

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<210> 3475
<211> 375
<212> PRT
<213> Homo sapiens

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          <400> 3475
Thr Ala Ala Arg Arg Arg Gln Lys Gly Ala Ala Ala Ala Ala Glu Thr
  1          5          10          15
His Gly Gln Ala Lys Ala Lys Ser Gly Trp Leu Lys Pro Tyr Tyr Phe
          20          25          30
Ile Glu Leu Met Glu Ser Arg Lys Asp Ile Thr Asn Gln Glu Glu Leu
          35          40          45
Trp Lys Met Lys Pro Arg Arg Asn Leu Glu Glu Asp Asp Tyr Leu His
          50          55          60
Lys Asp Thr Gly Glu Thr Ser Met Leu Lys Arg Pro Val Leu Leu His
65          70          75          80
Leu His Gln Thr Ala His Ala Asp Glu Phe Asp Cys Pro Ser Glu Leu
          85          90          95
Gln His Thr Gln Glu Leu Phe Pro Gln Trp His Leu Pro Ile Lys Ile
          100          105          110
Ala Ala Ile Ile Ala Ser Leu Thr Phe Leu Tyr Thr Leu Leu Arg Glu
          115          120          125
Val Ile His Pro Leu Ala Thr Ser His Gln Gln Tyr Phe Tyr Lys Ile
130          135          140
Pro Ile Leu Val Ile Asn Lys Val Leu Pro Met Val Ser Ile Thr Leu
145          150          155          160
Leu Ala Leu Val Tyr Leu Pro Gly Val Ile Ala Ala Ile Val Gln Leu
          165          170          175
His Asn Gly Thr Lys Tyr Lys Lys Phe Pro His Trp Leu Asp Lys Trp
          180          185          190
Met Leu Thr Arg Lys Gln Phe Gly Leu Leu Ser Phe Phe Ala Val
          195          200          205
Leu His Ala Ile Tyr Ser Leu Ser Tyr Pro Met Arg Arg Ser Tyr Arg

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210	215	220
Tyr Lys Leu Leu Asn Trp Ala Tyr Gln Gln Val Gln Gln Asn Lys Glu		
225	230	235
Asp Ala Leu Ile Glu His Asp Val Trp Arg Met Glu Ile Tyr Val Ser		240
	245	250
Leu Gly Ile Val Gly Leu Ala Ile Leu Ala Leu Leu Ala Val Thr Ser		255
	260	265
Ile Pro Ser Val Ser Asp Ser Leu Thr Trp Arg Glu Phe His Tyr Ile		270
	275	280
Gln Ser Lys Leu Gly Ile Val Ser Leu Leu Leu Gly Thr Ile His Ala		285
	290	295
Leu Ile Phe Ala Trp Asn Lys Trp Ile Asp Ile Lys Gln Phe Val Trp		300
305	310	315
Tyr Thr Pro Pro Thr Phe Met Ile Ala Val Phe Leu Pro Ile Val Val		320
	325	330
Leu Ile Phe Lys Ser Ile Leu Phe Leu Pro Cys Leu Arg Lys Lys Ile		335
	340	345
Leu Lys Ile Arg His Gly Trp Glu Asp Val Thr Lys Ile Asn Lys Thr		350
	355	360
Glu Ile Cys Ser Gln Leu		365
370	374	

<210> 3476
 <211> 1016
 <212> PRT
 <213> Homo sapiens

<400> 3476

Ala Lys Ala Pro Pro Thr Gly Glu Ser Ser Glu Pro Glu Ala Lys Val	
1	5
Leu His Thr Lys Arg Leu Tyr Arg Ala Val Val Glu Ala Val His Arg	10
	20
Leu Asp Leu Ile Leu Cys Asn Lys Thr Ala Tyr Gln Glu Val Phe Lys	25
	35
Pro Glu Asn Ile Ser Leu Arg Asn Lys Leu Arg Glu Leu Cys Val Lys	40
	50
Leu Met Phe Leu His Pro Val Asp Tyr Gly Arg Lys Ala Glu Glu Leu	55
65	70
Leu Trp Arg Lys Val Tyr Tyr Glu Val Ile Gln Leu Ile Lys Thr Asn	75
	85
Lys Lys His Ile His Ser Arg Ser Thr Leu Glu Cys Ala Tyr Arg Thr	90
	100
His Leu Val Ala Gly Ile Gly Phe Tyr Gln His Leu Leu Leu Tyr Ile	105
	115
Gln Ser His Tyr Gln Leu Glu Leu Gln Cys Cys Ile Asp Trp Thr His	120
130	135
Val Thr Asp Pro Leu Ile Gly Cys Lys Lys Pro Val Ser Ala Ser Gly	140
145	150
Lys Glu Met Asp Trp Ala Gln Met Ala Cys His Arg Cys Leu Val Tyr	155
	165
Leu Gly Asp Leu Ser Arg Tyr Gln Asn Glu Leu Ala Gly Val Asp Thr	170
	180
Glu Leu Leu Ala Glu Arg Phe Tyr Tyr Gln Ala Leu Ser Val Ala Pro	185
	195
Gln Ile Gly Met Pro Phe Asn Gln Leu Gly Thr Leu Ala Gly Ser Lys	200
210	215
Tyr Tyr Asn Val Glu Ala Met Tyr Cys Tyr Leu Arg Cys Ile Gln Ser	220
225	230
Glu Val Ser Phe Glu Gly Ala Tyr Gly Asn Leu Lys Arg Leu Tyr Asp	235
	245
Lys Ala Ala Lys Met Tyr His Gln Leu Lys Lys Cys Glu Thr Arg Lys	250
	255

260	265	270
Leu Ser Pro Gly Lys Lys Arg Cys Lys Asp Ile Lys Arg Leu Leu Val		
275	280	285
Asn Phe Met Tyr Leu Gln Ser Leu Leu Gln Pro Lys Ser Ser Ser Val		
290	295	300
Asp Ser Glu Leu Thr Ser Leu Cys Gln Ser Val Leu Glu Asp Phe Asn		
305	310	315
Leu Cys Leu Phe Tyr Leu Pro Ser Ser Pro Asn Leu Ser Leu Ala Ser		
325	330	335
Glu Asp Glu Glu Glu Tyr Glu Ser Gly Tyr Ala Phe Leu Pro Asp Leu		
340	345	350
Leu Ile Phe Gln Met Val Ile Ile Cys Leu Met Cys Val His Ser Leu		
355	360	365
Glu Arg Ala Gly Ser Lys Gln Tyr Ser Ala Ala Ile Ala Phe Thr Leu		
370	375	380
Ala Leu Phe Ser His Leu Val Asn His Val Asn Ile Arg Leu Gln Ala		
385	390	395
Glu Leu Glu Glu Gly Glu Asn Pro Val Pro Ala Phe Gln Ser Asp Gly		
405	410	415
Thr Asp Glu Pro Glu Ser Lys Glu Pro Val Glu Lys Glu Glu Glu Pro		
420	425	430
Asp Pro Glu Pro Pro Pro Val Thr Pro Gln Val Gly Glu Gly Arg Lys		
435	440	445
Ser Arg Lys Phe Ser Arg Leu Ser Cys Leu Arg Arg Arg Arg His Pro		
450	455	460
Pro Lys Val Gly Asp Asp Ser Asp Leu Ser Glu Gly Phe Glu Ser Asp		
465	470	475
Ser Ser His Asp Ser Ala Arg Ala Ser Glu Gly Ser Asp Ser Gly Ser		
485	490	495
Asp Lys Ser Leu Glu Gly Gly Gly Thr Ala Phe Asp Ala Glu Thr Asp		
500	505	510
Ser Glu Met Asn Ser Gln Glu Ser Arg Ser Asp Leu Glu Asp Met Glu		
515	520	525
Glu Glu Glu Gly Thr Arg Ser Pro Thr Leu Glu Pro Pro Arg Gly Arg		
530	535	540
Ser Glu Ala Pro Asp Ser Leu Asn Gly Pro Leu Gly Pro Ser Glu Ala		
545	550	555
Ser Ile Ala Ser Asn Leu Gln Ala Met Ser Thr Gln Met Phe Gln Thr		
565	570	575
Lys Arg Cys Phe Arg Leu Ala Pro Thr Phe Ser Asn Leu Leu Gln		
580	585	590
Pro Thr Thr Asn Pro His Thr Ser Ala Ser His Arg Pro Cys Val Asn		
595	600	605
Gly Asp Val Asp Lys Pro Ser Glu Pro Ala Ser Glu Glu Gly Ser Glu		
610	615	620
Ser Glu Gly Ser Glu Ser Ser Gly Arg Ser Cys Arg Asn Glu Arg Ser		
625	630	635
Ile Gln Glu Lys Leu Gln Val Leu Met Ala Glu Gly Leu Leu Pro Ala		
645	650	655
Val Lys Val Phe Leu Asp Trp Leu Arg Thr Asn Pro Asp Leu Ile Ile		
660	665	670
Val Cys Ala Gln Ser Ser Gln Ser Leu Trp Asn Arg Leu Ser Val Leu		
675	680	685
Leu Asn Leu Leu Pro Ala Ala Gly Glu Leu Gln Glu Ser Gly Leu Ala		
690	695	700
Leu Cys Pro Glu Val Gln Asp Leu Leu Glu Gly Cys Glu Leu Pro Asp		
705	710	715
Leu Pro Ser Ser Leu Leu Leu Pro Glu Asp Met Ala Leu Arg Asn Leu		
725	730	735
Pro Pro Leu Arg Ala Ala His Arg Arg Phe Asn Phe Asp Thr Asp Arg		
740	745	750
Pro Leu Leu Ser Thr Leu Glu Glu Ser Val Val Arg Ile Cys Cys Ile		
755	760	765
Arg Ser Phe Gly His Phe Ile Ala Arg Leu Gln Gly Ser Ile Leu Gln		

770	775	780
Phe Asn Pro Glu Val Gly Ile Phe Val Ser Ile Ala Gln Ser Glu Gln		
785	790	795
Glu Ser Leu Leu Gln Gln Ala Gln Ala Gln Phe Arg Met Ala Gln Glu		800
	805	810
Glu Ala Arg Arg Asn Arg Leu Met Arg Asp Met Ala Gln Leu Arg Leu		815
	820	825
Gln Leu Glu Val Ser Gln Leu Glu Gly Ser Leu Gln Gln Pro Lys Ala		830
	835	840
Gln Ser Ala Met Ser Pro Tyr Leu Val Pro Asp Thr Gln Ala Leu Cys		845
	850	855
His His Leu Pro Val Ile Arg Gln Leu Ala Thr Ser Gly Arg Phe Ile		860
865	870	875
Val Ile Ile Pro Arg Thr Val Ile Asp Gly Leu Asp Leu Leu Lys Lys		880
	885	890
Glu His Pro Gly Ala Arg Asp Gly Ile Arg Tyr Leu Glu Ala Glu Phe		895
	900	905
Lys Lys Gly Asn Arg Tyr Ile Arg Cys Gln Lys Glu Val Gly Lys Ser		910
	915	920
Phe Glu Arg His Lys Leu Lys Arg Gln Asp Ala Asp Ala Trp Thr Leu		925
	930	935
Tyr Lys Ile Leu Asp Ser Cys Lys Gln Leu Thr Leu Ala Gln Gly Ala		940
945	950	955
Gly Glu Glu Asp Pro Ser Gly Met Val Thr Ile Ile Thr Gly Leu Pro		960
	965	970
Leu Asp Asn Pro Ser Val Leu Ser Gly Pro Met Gln Ala Ala Leu Gln		975
	980	985
Ala Ala Ala His Ala Ser Val Asp Ile Lys Asn Val Leu Asp Phe Tyr		990
	995	1000
Lys Gln Trp Lys Glu Ile Gly		1005
1010	1015	

<210> 3477

<211> 1301

<212> PRT

<213> Homo sapiens .

<400> 3477

Met Thr Glu Pro Arg Glu Arg Arg Gly Tyr Ser Val Pro Pro Arg Pro	
1 5 10 15	
Glu Val Gly Thr Gln Ala Thr Glu Trp Arg Val Glu Glu Ser Asn Phe	
20 25 30	
Asn Lys Ile Phe Leu Lys Lys Asp Ala Glu Leu Gly Arg Ser Asn His	
35 40 45	
Leu Pro Thr Trp Asp Lys Pro Glu Asp Ala Ser Trp Leu Pro Gln Ser	
50 55 60	
Cys Leu Gly Gly Asp Ala Val Ala Thr Thr Gly Glu Ile His Glu Glu	
65 70 75 80	
Lys Ala Trp Lys Thr Arg Ala Leu Glu Val Gly Gln Pro Ala Gln Arg	
85 90 95	
Asp Ile Arg Arg Gly Glu Leu Trp Gly Lys Glu His Gly Ala Asp Gln	
100 105 110	
Ala Ile Gln Glu Thr Leu Glu Asp Leu Ser Ser Leu Glu Arg Thr Leu	
115 120 125	
Val Val Ser Glu Ser Ser Pro Leu Gly Gly Asp Cys Gln Glu Val Thr	
130 135 140	
Thr Leu Thr Val Lys Tyr Gln Val Ser Glu Glu Val Pro Ser Gly Thr	
145 150 155 160	
Val Ile Gly Lys Leu Ser Gln Glu Leu Gly Arg Glu Glu Arg Arg Arg	
165 170 175	
Gln Ala Gly Ala Ala Phe Gln Val Leu Gln Leu Pro Gln Ala Leu Pro	

5195

690	695	700
Leu Val Pro Ile Glu Thr	Pro Asn Gly Leu Gly	Pro Ala Gly Thr Asp
705	710	715
Thr Pro Pro Leu Ala Thr	His Ser Ser Arg Pro Phe Leu Leu Thr Thr	720
	725	730
Ile Val Ala Arg Asp Ala Asp Ser Gly Ala Asn Gly Glu Pro Leu Tyr		735
	740	745
Ser Ile Arg Ser Gly Asn Glu Ala His Leu Phe Ile Leu Asn Pro His		750
	755	760
Thr Gly Gln Leu Phe Val Asn Val Thr Asn Ala Ser Ser Leu Ile Gly		765
	770	775
Ser Glu Trp Glu Leu Glu Ile Val Val Glu Asp Gln Gly Ser Pro Pro		780
785	790	795
Leu Gln Thr Arg Ala Leu Leu Arg Val Met Phe Val Thr Ser Val Asp		800
	805	810
His Leu Arg Asp Ser Ala Arg Lys Pro Gly Ala Leu Ser Met Ser Met		815
	820	825
Leu Thr Val Ile Cys Leu Ala Val Leu Leu Gly Ile Phe Gly Leu Ile		830
	835	840
Leu Ala Leu Phe Met Ser Ile Cys Arg Thr Glu Lys Lys Asp Asn Arg		845
	850	855
Ala Tyr Asn Cys Arg Glu Ala Glu Ser Thr Tyr Arg Gln Gln Pro Lys		860
865	870	875
Arg Pro Gln Lys His Ile Gln Lys Ala Asp Ile His Leu Val Pro Val		880
	885	890
Leu Arg Gly Gln Ala Gly Glu Pro Cys Glu Val Gly Gln Ser His Lys		895
	900	905
Asp Val Asp Lys Glu Ala Met Met Glu Ala Gly Trp Asp Pro Cys Leu		910
	915	920
Gln Ala Pro Phe His Leu Thr Pro Thr Leu Tyr Arg Thr Leu Arg Asn		925
	930	935
Gln Gly Asn Gln Gly Ala Pro Ala Glu Ser Arg Glu Val Leu Gln Asp		940
945	950	955
Thr Val Asn Leu Leu Phe Asn His Pro Arg Gln Arg Asn Ala Ser Arg		960
	965	970
Glu Asn Leu Asn Leu Pro Glu Pro Gln Pro Ala Thr Gly Gln Pro Arg		975
	980	985
Ser Arg Pro Leu Lys Val Ala Gly Ser Pro Thr Gly Arg Leu Ala Gly		990
	995	1000
Asp Gln Gly Ser Glu Glu Ala Pro Gln Arg Pro Pro Ala Ser Ser Ala		1005
	1010	1015
Thr Leu Arg Arg Gln Arg His Leu Asn Gly Lys Val Ser Pro Glu Lys		1020
1025	1030	1035
Glu Ser Gly Pro Arg Gln Ile Leu Arg Ser Leu Val Arg Leu Ser Val		1040
	1045	1050
Ala Ala Phe Ala Glu Arg Asn Pro Val Glu Glu Leu Thr Val Asp Ser		1055
	1060	1065
Pro Pro Val Gln Gln Ile Ser Gln Leu Leu Ser Leu Leu His Gln Gly		1070
	1075	1080
Gln Phe Gln Pro Lys Pro Asn His Arg Gly Asn Lys Tyr Leu Ala Lys		1085
	1090	1095
Pro Gly Gly Ser Arg Ser Ala Ile Pro Asp Thr Asp Gly Pro Ser Ala		1100
1105	1110	1115
Arg Ala Gly Gly Gln Thr Asp Pro Glu Gln Glu Glu Gly Pro Leu Asp		1120
	1125	1130
Pro Glu Glu Asp Leu Ser Val Lys Gln Leu Leu Glu Glu Glu Leu Ser		1135
	1140	1145
Ser Leu Leu Asp Pro Ser Thr Gly Leu Ala Leu Asp Arg Leu Ser Ala		1150
	1155	1160
Pro Asp Pro Ala Trp Met Ala Arg Leu Ser Leu Pro Leu Thr Thr Asn		1165
	1170	1175
Tyr Arg Asp Asn Val Ile Ser Pro Asp Ala Ala Ala Thr Glu Glu Pro		1180
1185	1190	1195
Arg Thr Phe Gln Thr Phe Gly Lys Ala Glu Ala Pro Glu Leu Ser Pro		1200

1205 1210 1215
 Thr Gly Thr Arg Leu Ala Ser Thr Phe Val Ser Glu Met Ser Ser Leu
 1220 1225 1230
 Leu Glu Met Leu Leu Glu Gln Arg Ser Ser Met Pro Val Glu Ala Ala
 1235 1240 1245
 Ser Glu Ala Leu Arg Arg Leu Ser Val Cys Gly Arg Thr Leu Ser Leu
 1250 1255 1260
 Asp Leu Ala Thr Ser Ala Ala Ser Gly Met Lys Val Gln Gly Asp Pro
 1265 1270 1275 1280
 Gly Gly Lys Thr Gly Thr Glu Gly Lys Ser Arg Gly Ser Ser Ser Ser
 1285 1290 1295
 Ser Arg Cys Leu
 1300

<210> 3478
 <211> 536
 <212> PRT
 <213> Homo sapiens

<400> 3478
 Thr Leu Pro Pro Pro Gly Asn Ser Gly Cys His Arg Leu Cys Phe Pro
 1 5 10 15
 Glu Phe Glu Phe Leu Gln Val Thr Lys Met Glu Phe Ser Gly Arg Lys
 20 25 30
 Trp Arg Lys Leu Arg Leu Ala Gly Asp Gln Arg Asn Ala Ser Tyr Pro
 35 40 45
 His Cys Leu Gln Phe Tyr Leu Gln Pro Pro Ser Glu Asn Ile Ser Leu
 50 55 60
 Ile Glu Phe Glu Asn Leu Ala Ile Asp Arg Val Lys Leu Leu Lys Ser
 65 70 75 80
 Val Glu Asn Leu Gly Val Ser Tyr Val Lys Gly Thr Glu Gln Tyr Gln
 85 90 95
 Ser Lys Leu Glu Ser Glu Leu Arg Lys Leu Lys Phe Ser Tyr Arg Glu
 100 105 110
 Asn Leu Glu Asp Glu Tyr Glu Pro Arg Arg Arg Asp His Ile Ser His
 115 120 125
 Phe Ile Leu Arg Leu Ala Tyr Cys Gln Ser Glu Glu Leu Arg Arg Trp
 130 135 140
 Phe Ile Gln Gln Glu Met Asp Leu Leu Arg Phe Arg Phe Ser Ile Leu
 145 150 155 160
 Pro Lys Asp Lys Ile Gln Asp Phe Leu Lys Asp Ser Gln Leu Gln Phe
 165 170 175
 Glu Ala Ile Ser Asp Glu Glu Lys Thr Leu Arg Glu Gln Glu Ile Val
 180 185 190
 Ala Ser Ser Pro Ser Leu Ser Gly Leu Lys Leu Gly Phe Glu Ser Ile
 195 200 205
 Tyr Lys Ile Pro Phe Ala Asp Ala Leu Asp Leu Phe Arg Gly Arg Lys
 210 215 220
 Val Tyr Leu Glu Asp Gly Phe Ala Tyr Val Pro Leu Lys Asp Ile Val
 225 230 235 240
 Ala Ile Ile Leu Asn Glu Phe Arg Ala Lys Leu Ser Lys Ala Leu Ala
 245 250 255
 Leu Thr Ala Arg Ser Leu Pro Ala Val Gln Ser Asp Glu Arg Leu Gln
 260 265 270
 Pro Leu Leu Asn His Leu Ser His Ser Tyr Thr Gly Gln Asp Tyr Ser
 275 280 285
 Thr Gln Gly Asn Val Gly Lys Ile Ser Leu Asp Gln Ile Asp Leu Leu
 290 295 300
 Ser Thr Lys Ser Phe Pro Pro Cys Met Arg Gln Leu His Lys Ala Leu
 305 310 315 320
 Arg Glu Asn His His Leu Arg His Gly Gly Arg Met Gln Tyr Gly Leu

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          325          330          335
Phe Leu Lys Gly Ile Gly Leu Thr Leu Glu Gln Ala Leu Gln Phe Trp
          340          345          350
Lys Gln Glu Phe Ile Lys Gly Lys Met Asp Pro Asp Lys Phe Asp Lys
          355          360          365
Gly Tyr Ser Tyr Asn Ile Arg His Ser Phe Gly Lys Glu Gly Lys Arg
          370          375          380
Thr Asp Tyr Thr Pro Phe Ser Cys Leu Lys Ile Ile Leu Ser Asn Pro
          385          390          395          400
Pro Ser Gln Gly Asp Tyr His Gly Cys Pro Phe Arg His Ser Asp Pro
          405          410          415
Glu Leu Leu Lys Gln Lys Leu Gln Ser Tyr Lys Ile Ser Pro Gly Gly
          420          425          430
Ile Ser Gln Ile Leu Asp Leu Val Lys Gly Thr His Tyr Gln Val Ala
          435          440          445
Cys Gln Lys Tyr Phe Glu Met Ile His Thr Val Asp Asp Cys Gly Phe
          450          455          460
Ser Leu Ser His Pro Asn Gln Tyr Phe Cys Glu Ser Gln Arg Ile Leu
          465          470          475          480
Asn Gly Gly Lys Asp Ile Lys Lys Glu Pro Ile Gln Pro Glu Thr Pro
          485          490          495
Gln Pro Lys Pro Ser Val Gln Lys Thr Lys Asp Ala Ser Ser Ala Leu
          500          505          510
Ala Ser Leu Asn Ser Ser Leu Glu Met Asp Met Glu Gly Leu Glu Asp
          515          520          525
Tyr Phe Ser Glu Asp Ser
          530          534

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<210> 3479

<211> 190

<212> PRT

<213> Homo sapiens

<400> 3479

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Arg Pro Glu Leu Glu Leu Trp Arg Leu Arg Ser Arg Ser Trp Arg Pro
  1          5          10          15
Leu Gly Val Pro Arg Arg Cys His Arg Arg Asn Trp Lys Glu Pro Val
          20          25          30
Arg Ala Gln Pro Leu Ser Val Thr Val Trp Ala Pro Arg Cys Gln Arg
          35          40          45
Pro Gln Pro Pro Ala Pro Glu Pro Ser Ser Pro Asn Ala Ala Val Pro
          50          55          60
Glu Ala Ile Pro Thr Pro Arg Ala Ala Ala Ser Ala Ala Leu Glu Leu
          65          70          75          80
Pro Leu Gly Pro Ala Pro Val Ser Val Ala Pro Gln Ala Glu Ala Glu
          85          90          95
Ala Arg Ser Thr Pro Gly Pro Ala Gly Ser Arg Leu Gly Pro Glu Thr
          100          105          110
Phe Arg Gln Arg Phe Arg Gln Phe Arg Tyr Gln Asp Ala Ala Gly Pro
          115          120          125
Arg Glu Ala Phe Arg Gln Leu Arg Glu Leu Ser Pro Arg Gln Trp Leu
          130          135          140
Arg Pro Asp Ile Arg Thr Lys Glu Gln Ile Val Glu Met Leu Val Gln
          145          150          155          160
Glu Gln Leu Leu Ala Ile Leu Pro Glu Ala Ala Arg Ala Arg Arg Ile
          165          170          175
Arg Arg Arg Thr Asp Val Arg Ile Thr Gly
          180          185 186

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<210> 3480
 <211> 704
 <212> PRT
 <213> Homo sapiens

<400> 3480

Arg	Arg	Gly	Ser	Arg	Ser	Arg	Gly	Pro	Phe	Ala	Glu	Pro	Ala	Ala	Pro
1				5					10					15	
Gly	Gly	Leu	Cys	Ser	Ser	Ser	Glu	Glu	Lys	Thr	Glu	Glu	Gly	Gly	Met
		20					25						30		
Ala	Val	Gly	Leu	Cys	Lys	Ala	Met	Ser	Gln	Gly	Leu	Val	Thr	Phe	Arg
	35						40					45			
Asp	Val	Ala	Leu	Asp	Phe	Ser	Gln	Glu	Glu	Trp	Glu	Trp	Leu	Lys	Pro
	50				55						60				
Ser	Gln	Lys	Asp	Leu	Tyr	Arg	Asp	Val	Met	Leu	Glu	Asn	Tyr	Arg	Asn
	65			70					75					80	
Leu	Val	Trp	Leu	Gly	Leu	Ser	Ile	Ser	Lys	Pro	Asn	Met	Ile	Ser	Leu
			85						90					95	
Leu	Glu	Gln	Gly	Lys	Glu	Pro	Trp	Met	Val	Glu	Arg	Lys	Met	Ser	Gln
		100					105						110		
Gly	His	Cys	Ala	Asp	Trp	Glu	Ser	Trp	Trp	Glu	Ile	Glu	Glu	Leu	Ser
	115					120						125			
Pro	Lys	Trp	Phe	Ile	Asp	Glu	Asp	Glu	Ile	Ser	Gln	Glu	Met	Val	Met
	130				135						140				
Glu	Arg	Leu	Ala	Ser	His	Gly	Leu	Glu	Cys	Ser	Ser	Phe	Arg	Glu	Ala
	145				150				155						160
Trp	Lys	Tyr	Lys	Gly	Glu	Phe	Glu	Leu	His	Gln	Gly	Asn	Ala	Glu	Arg
			165				170							175	
His	Phe	Met	Gln	Val	Thr	Ala	Val	Lys	Glu	Ile	Ser	Thr	Gly	Lys	Arg
		180					185						190		
Asp	Asn	Glu	Phe	Ser	Asn	Ile	Trp	Glu	Lys	His	Thr	Pro	Glu	Ile	Ser
	195					200						205			
Ile	Phe	Asn	Thr	Thr	Glu	Ser	Pro	Thr	Ile	Gln	Gln	Val	His	Lys	Phe
	210					215					220				
Asp	Ile	Tyr	Asp	Lys	Leu	Phe	Pro	Gln	Asn	Ser	Val	Ile	Ile	Glu	Tyr
	225				230					235				240	
Lys	Arg	Leu	His	Ala	Glu	Lys	Glu	Ser	Leu	Ile	Gly	Asn	Glu	Cys	Glu
			245						250					255	
Glu	Phe	Asn	Gln	Ser	Thr	Tyr	Leu	Ser	Lys	Asp	Ile	Gly	Ile	Pro	Pro
		260					265						270		
Gly	Glu	Lys	Pro	Tyr	Glu	Ser	His	Asp	Phe	Ser	Lys	Leu	Leu	Ser	Phe
		275					280					285			
His	Ser	Leu	Phe	Thr	Gln	His	Gln	Thr	Thr	His	Phe	Gly	Lys	Leu	Pro
	290				295						300				
His	Gly	Tyr	Asp	Glu	Cys	Gly	Asp	Ala	Phe	Ser	Cys	Tyr	Ser	Phe	Phe
	305				310					315					320
Thr	Gln	Pro	Gln	Arg	Ile	His	Ser	Gly	Glu	Lys	Pro	Tyr	Ala	Cys	Asn
			325						330					335	
Asp	Cys	Gly	Lys	Ala	Phe	Ser	His	Asp	Phe	Phe	Leu	Ser	Glu	His	Gln
		340						345					350		
Arg	Thr	His	Ile	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Lys	Glu	Cys	Asn	Lys
		355					360					365			
Ala	Phe	Arg	Gln	Ser	Ala	His	Leu	Ala	Gln	His	Gln	Arg	Ile	His	Thr
	370					375					380				
Gly	Glu	Lys	Pro	Phe	Ala	Cys	Asn	Glu	Cys	Gly	Lys	Ala	Phe	Ser	Arg
	385				390					395					400
Tyr	Ala	Phe	Leu	Val	Glu	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro
			405						410					415	
Tyr	Glu	Cys	Lys	Glu	Cys	Asn	Lys	Ala	Phe	Arg	Gln	Ser	Ala	His	Leu
		420						425					430		
Asn	Gln	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Asn
	435						440					445			
Gln	Cys	Gly	Lys	Ala	Phe	Ser	Arg	Arg	Ile	Ala	Leu	Thr	Leu	His	Gln

450	455	460
Arg Ile His Thr Gly	Glu Lys Pro Phe Lys Cys Ser Glu Cys Gly Lys	
465	470	475
Thr Phe Gly Tyr Arg Ser His Leu Asn Gln His Gln Arg Ile His Thr		480
	485	490
Gly Glu Lys Pro Tyr Glu Cys Ile Lys Cys Gly Lys Phe Phe Arg Thr		495
	500	505
Asp Ser Gln Leu Asn Arg His His Arg Ile His Thr Gly Glu Arg Pro		510
	515	520
Phe Glu Cys Ser Lys Cys Gly Lys Ala Phe Ser Asp Ala Leu Val Leu		525
	530	535
Ile His His Lys Arg Ser His Ala Gly Glu Lys Pro Tyr Glu Cys Asn		540
545	550	555
Lys Cys Gly Lys Ala Phe Ser Cys Gly Ser Tyr Leu Asn Gln His Gln		560
	565	570
Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Ser Glu Cys Gly Lys		575
	580	585
Ala Phe His Gln Ile Leu Ser Leu Arg Leu His Gln Arg Ile His Ala		590
	595	600
Gly Glu Lys Pro Tyr Lys Cys Asn Glu Ser Gln Arg Val Arg Arg Ser		605
	610	615
Glu Leu Ala Val Ser Arg Gly Leu Thr Thr Lys Pro Ala Asp Thr Gly		620
625	630	635
Pro Asp Ser Thr Leu Asn Ala Ala Lys Val Ala Glu Pro Ala Arg Ala		640
	645	650
Gly Thr Glu Ala Leu Arg Pro Ala Leu Ser Val Ala Glu Ser Ala		655
	660	665
Thr Ser Leu Gly Pro Leu His Gln Gly Arg Arg Phe Pro Glu Ala Pro		670
	675	680
Ala Ala His Pro Gly Gly Thr Gly Phe Thr Val Cys Ala Ser		685
	690	700
	695	702

<210> 3481

<211> 507

<212> PRT

<213> Homo sapiens

<400> 3481

Ala Ser Arg His Gly Met Thr Pro Gly Ala Leu Leu Met Leu Leu Gly	
1	5
Ala Leu Gly Pro Pro Leu Ala Pro Gly Val Arg Gly Ser Glu Ala Glu	10
	20
Gly Arg Leu Arg Glu Lys Leu Phe Ser Gly Tyr Asp Ser Ser Val Arg	25
	30
Pro Ala Arg Glu Val Gly Asp Arg Val Arg Val Ser Val Gly Leu Ile	35
	40
Leu Ala Gln Leu Ile Ser Leu Asn Glu Lys Asp Glu Glu Met Ser Thr	45
	50
Lys Val Tyr Leu Asp Leu Glu Trp Thr Asp Tyr Arg Leu Ser Trp Asp	55
	60
Pro Ala Glu His Asp Gly Ile Asp Ser Leu Arg Ile Thr Ala Glu Ser	65
	70
Val Trp Leu Pro Asp Val Val Leu Leu Asn Asn Asn Asp Gly Asn Phe	75
	80
Asp Val Ala Leu Asp Ile Ser Val Val Val Ser Ser Asp Gly Ser Val	85
	90
Arg Trp Gln Pro Pro Gly Ile Tyr Arg Ser Ser Cys Ser Ile Gln Val	95
	100
Thr Tyr Phe Pro Phe Asp Trp Gln Asn Cys Thr Met Val Phe Ser Ser	105
	110
Tyr Ser Tyr Asp Ser Ser Glu Val Ser Leu Gln Thr Gly Leu Gly Pro	115
	120
	125
	130
	135
	140
	145
	150
	155
	160
	165
	170
	175

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      180      185      190
Asp Gly Gln Gly His Gln Glu Ile His Ile His Glu Gly Thr Phe Ile
      195      200      205
Glu Asn Gly Gln Trp Glu Asn Ile His Lys Pro Ser Arg Leu Ile Gln
      210      215      220
Pro Pro Gly Asp Pro Arg Gly Gly Arg Glu Gly Gln Arg Gln Glu Val
      225      230      235      240
Ile Phe Tyr Leu Ile Ile Arg Arg Lys Pro Leu Phe Tyr Leu Val Asn
      245      250      255
Val Ile Ala Pro Cys Ile Leu Ile Thr Leu Leu Ala Ile Phe Val Phe
      260      265      270
Tyr Leu Pro Pro Asp Ala Gly Glu Lys Met Gly Leu Ser Ile Phe Ala
      275      280      285
Leu Leu Thr Leu Thr Val Phe Leu Leu Leu Leu Ala Asp Lys Val Pro
      290      295      300
Glu Thr Ser Leu Ser Val Pro Ile Ile Ile Lys Tyr Leu Met Phe Thr
      305      310      315      320
Met Val Leu Val Thr Phe Ser Val Ile Leu Ser Val Val Val Leu Asn
      325      330      335
Leu His His Arg Ser Pro His Thr His Gln Met Pro Leu Trp Val Arg
      340      345      350
Gln Ile Phe Ile His Lys Leu Pro Leu Tyr Leu Arg Leu Lys Arg Pro
      355      360      365
Lys Pro Glu Arg Asp Leu Met Pro Glu Pro Pro His Cys Ser Ser Pro
      370      375      380
Gly Ser Gly Trp Gly Arg Gly Thr Asp Glu Tyr Phe Ile Arg Lys Pro
      385      390      395      400
Pro Ser Asp Phe Leu Phe Pro Lys Pro Asn Arg Phe Gln Pro Glu Leu
      405      410      415
Ser Ala Pro Asp Leu Arg Arg Phe Ile Asp Gly Pro Asn Arg Ala Val
      420      425      430
Ala Leu Leu Pro Glu Leu Arg Glu Val Val Ser Ser Ile Ser Tyr Ile
      435      440      445
Ala Arg Gln Leu Gln Glu Gln Asp His Asp Ala Leu Lys Glu Asp
      450      455      460
Trp Gln Phe Val Ala Met Val Val Asp Arg Leu Phe Leu Trp Thr Phe
      465      470      475      480
Ile Ile Phe Thr Ser Val Gly Thr Leu Val Ile Phe Leu Asp Ala Thr
      485      490      495
Tyr His Leu Pro Pro Pro Asp Pro Phe Pro
      500      505 506

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<210> 3482

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3482

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Glu Arg Trp Asp Ser Gly Gly Ala Asp Ala Glu Trp Tyr Ala Leu Ala
 1      5      10      15
Asp Trp Thr Ala Val Trp Leu Pro Arg Ser Asp Phe Tyr Thr Arg Leu
      20      25      30
Gln Thr Gly Glu Gly His Val Pro Ala Leu Arg Leu Pro Ala Gly Met
      35      40      45
Pro Pro Asp Ser Pro Arg Glu Leu Val Pro Lys Gln Ala Pro Cys Ser
      50      55      60
Pro Ser Asp Pro Ala Leu Pro Trp Thr Leu Gly His Gly Asn Gln Pro
      65      70      75      80
Pro Ala Val Val Pro Glu Pro Gln Gly Pro Met Gly Pro Ala Gly Val
      85      90      95
Ala Ala Arg Pro Gly Arg Phe Phe Gly Val Tyr Leu Leu Tyr Cys Leu

```

100	105	110
Asn Pro Arg Tyr Arg Val Arg Val Tyr Val Gly Phe Thr Val Asn Thr		
115	120	125
Ala Arg Arg Val Gln Gln His Asn Gly Gly Arg Lys Lys Gly Gly Ala		
130	135	140
Gly Arg Thr Ser Gly Arg Gly Pro Trp Glu Met Val Leu Val Val His		
145	150	155
Gly Phe Pro Ser Ser Val Ala Ala Leu Arg Phe Glu Trp Ala Trp Gln		
165	170	175
His Pro His Ala Ser Arg Arg Leu Ala His Val Gly Pro Arg Leu Arg		
180	185	190
Gly Glu Thr Ala Phe Ala Phe His Leu Arg Val Leu Ala His Met Leu		
195	200	205
Arg Ala Pro Pro Trp Ala Arg Leu Pro Leu Thr Leu Arg Trp Val Arg		
210	215	220
Pro Asp Leu Arg Gln Asp Leu Cys Leu Pro Pro Pro Pro His Val Leu		
225	230	235
Leu Ala Phe Gly Pro Pro Pro Ala Gln Val Pro Arg Pro Gln Arg Arg		
245	250	255
Arg Ala Gly Pro Phe Asp Asp Ala Glu Pro Glu Pro Asp Gln Gly Asp		
260	265	270
Pro Gly Ala Cys Cys Ser Leu Cys Ala Gln Thr Ile Gln Asp Glu Glu		
275	280	285
Gly Pro Leu Cys Cys Pro His Pro Gly Cys Leu Leu Arg Ala His Val		
290	295	300
Ile Cys Leu Ala Glu Glu Phe Leu Gln Glu Glu Pro Gly Gln Leu Leu		
305	310	315
Pro Leu Glu Gly Gln Cys Pro Cys Cys Glu Lys Ser Leu Leu Trp Gly		
325	330	335
Asp Leu Ile Trp Leu Cys Gln Met Asp Thr Glu Lys Glu Val Glu Asp		
340	345	350
Ser Glu Leu Glu Glu Ala His Trp Thr Asp Leu Leu Glu Thr		
355	360	365 366

<210> 3483

<211> 1153

<212> PRT

<213> Homo sapiens

<400> 3483

Trp Arg Pro Trp Pro Cys Ile Asp Thr Ser Trp Asn Leu Gln Val Ala	
1	5 10 15
Ala Arg Thr Leu Arg Val Ser Ser Ala Gln Cys Gly Leu Val Pro Thr	
20	25 30
Met Ala Arg Val Glu Ser Pro Val Pro Ala Ala Arg Ala Ser Leu Thr	
35	40 45
Gly Ser Cys Val Leu Gly Gln Ala Met Pro Leu Arg Gly Gly Ala Gly	
50	55 60
Pro Ser Pro Ala Ser His Gly Pro Thr His Gly Pro Ser Asp Pro Arg	
65	70 75 80
Thr Cys Leu Pro Gly Arg Gly Ala Gly Gly Met Arg Pro His Gly Arg	
85	90 95
Gly Ala Leu Gly Cys Cys Gly Leu Cys Ser Phe Tyr Thr Cys His Gly	
100	105 110
Ala Ala Gly Asp Glu Ile Met His Gln Asp Ile Val Pro Leu Cys Ala	
115	120 125
Ala Asp Ile Gln Asp Gln Leu Lys Lys Arg Phe Ala Tyr Leu Ser Gly	
130	135 140
Gly Arg Gly Gln Asp Gly Ser Pro Val Ile Thr Phe Pro Asp Tyr Pro	
145	150 155 160
Ala Phe Ser Glu Ile Pro Asp Lys Glu Phe Gln Asn Val Met Thr Tyr	

				165					170				175		
Leu	Thr	Ser	Ile	Pro	Ser	Leu	Gln	Asp	Ala	Gly	Ile	Gly	Phe	Ile	Leu
			180					185					190		
Val	Ile	Asp	Arg	Arg	Arg	Asp	Lys	Trp	Thr	Ser	Val	Lys	Ala	Ser	Val
		195					200					205			
Leu	Arg	Ile	Ala	Ala	Ser	Phe	Pro	Ala	Asn	Leu	Gln	Leu	Val	Leu	Val
	210					215					220				
Leu	Arg	Pro	Thr	Gly	Phe	Phe	Gln	Arg	Thr	Leu	Ser	Asp	Ile	Ala	Phe
	225				230					235				240	
Lys	Phe	Asn	Arg	Asp	Asp	Phe	Lys	Met	Lys	Val	Pro	Val	Ile	Met	Leu
			245					250					255		
Ser	Ser	Val	Pro	Asp	Leu	His	Gly	Tyr	Ile	Asp	Lys	Ser	Gln	Leu	Thr
			260					265					270		
Glu	Asp	Leu	Gly	Gly	Thr	Leu	Asp	Tyr	Cys	His	Ser	Arg	Trp	Leu	Cys
	275					280						285			
Gln	Arg	Thr	Ala	Ile	Glu	Ser	Phe	Ala	Leu	Met	Val	Lys	Gln	Thr	Ala
	290					295					300				
Gln	Met	Leu	Gln	Ser	Phe	Gly	Thr	Glu	Leu	Ala	Glu	Thr	Glu	Leu	Pro
	305				310					315				320	
Asn	Asp	Val	Gln	Ser	Thr	Ser	Ser	Val	Leu	Cys	Ala	His	Thr	Glu	Lys
			325					330					335		
Lys	Asp	Lys	Ala	Lys	Glu	Asp	Leu	Arg	Leu	Ala	Leu	Lys	Glu	Gly	His
			340					345					350		
Ser	Val	Leu	Glu	Ser	Leu	Arg	Glu	Leu	Gln	Ala	Glu	Gly	Ser	Glu	Pro
		355					360					365			
Ser	Val	Asn	Gln	Asp	Gln	Leu	Asp	Asn	Gln	Ala	Thr	Val	Gln	Arg	Leu
	370					375						380			
Leu	Ala	Gln	Leu	Asn	Glu	Thr	Glu	Ala	Ala	Phe	Asp	Glu	Phe	Trp	Ala
	385				390					395				400	
Lys	His	Gln	Gln	Lys	Leu	Glu	Gln	Cys	Leu	Gln	Leu	Arg	His	Phe	Glu
			405					410					415		
Gln	Gly	Phe	Arg	Glu	Val	Lys	Ala	Ile	Leu	Asp	Ala	Ala	Ser	Gln	Lys
			420					425					430		
Ile	Ala	Thr	Phe	Thr	Asp	Ile	Gly	Asn	Ser	Leu	Ala	His	Val	Glu	His
	435					440						445			
Leu	Leu	Arg	Asp	Leu	Ala	Asn	Phe	Gln	Glu	Lys	Ser	Gly	Val	Phe	Val
	450				455							460			
Glu	Arg	Ala	Arg	Ala	Leu	Ser	Leu	Thr	Ala	Ser	Ser	Phe	Ile	Gly	Asn
	465				470					475				480	
Lys	His	Tyr	Ala	Val	Asp	Ser	Ile	Arg	Pro	Lys	Cys	Gln	Glu	Leu	Arg
			485					490					495		
His	Leu	Cys	Asp	Gln	Phe	Ser	Ala	Glu	Ile	Ala	Arg	Arg	Arg	Gly	Leu
			500					505					510		
Leu	Ser	Lys	Ser	Leu	Glu	Leu	His	Arg	Arg	Leu	Glu	Thr	Ser	Met	Lys
	515						520					525			
Trp	Cys	Asp	Glu	Gly	Ile	Tyr	Leu	Leu	Ala	Ser	Gln	Pro	Val	Asp	Lys
	530					535						540			
Cys	Gln	Ser	Gln	Asp	Gly	Ala	Glu	Ala	Ala	Leu	Gln	Glu	Ile	Glu	Lys
	545				550					555				560	
Phe	Leu	Glu	Thr	Gly	Ala	Glu	Asn	Lys	Ile	Gln	Glu	Leu	Asn	Ala	Ile
			565					570					575		
Tyr	Lys	Glu	Tyr	Glu	Ser	Ile	Leu	Asn	Gln	Asp	Leu	Met	Glu	His	Val
			580					585					590		
Arg	Lys	Val	Phe	Gln	Lys	Gln	Ala	Ser	Met	Glu	Glu	Val	Phe	His	Arg
	595						600					605			
Arg	Gln	Ala	Ser	Leu	Lys	Lys	Leu	Ala	Ala	Arg	Gln	Thr	Arg	Pro	Val
	610					615						620			
Gln	Pro	Val	Ala	Pro	Arg	Pro	Glu	Ala	Leu	Ala	Lys	Ser	Pro	Cys	Pro
	625				630					635				640	
Ser	Pro	Gly	Ile	Arg	Arg	Gly	Ser	Glu	Asn	Ser	Ser	Ser	Glu	Gly	Gly
			645					650					655		
Ala	Leu	Arg	Arg	Gly	Pro	Tyr	Arg	Arg	Ala	Lys	Ser	Glu	Met	Ser	Glu
			660					665					670		
Ser	Arg	Gln	Gly	Arg	Gly	Ser	Ala	Gly	Glu	Glu	Glu	Glu	Ser	Leu	Ala

675	680	685
Ile Leu Arg Arg His Val Met Ser Glu Leu Leu Asp Thr Glu Arg Ala		
690	695	700
Tyr Val Glu Glu Leu Leu Cys Val Leu Glu Gly Tyr Ala Ala Glu Met		
705	710	715
Asp Asn Pro Leu Met Ala His Leu Leu Ser Thr Gly Leu His Asn Lys		
725	730	735
Lys Asp Val Leu Phe Gly Asn Met Glu Glu Ile Tyr His Phe His Asn		
740	745	750
Arg Ile Phe Leu Arg Glu Leu Glu Asn Tyr Thr Asp Cys Pro Glu Leu		
755	760	765
Val Gly Arg Cys Phe Leu Glu Arg Met Glu Asp Phe Gln Ile Tyr Glu		
770	775	780
Lys Tyr Cys Gln Asn Lys Pro Arg Ser Glu Ser Leu Trp Arg Gln Cys		
785	790	795
Ser Asp Cys Pro Phe Phe Gln Glu Cys Gln Arg Lys Leu Asp His Lys		
805	810	815
Leu Ser Leu Asp Ser Tyr Leu Leu Lys Pro Val Gln Arg Ile Thr Lys		
820	825	830
Tyr Gln Leu Leu Lys Glu Met Leu Lys Tyr Ser Arg Asn Cys Glu		
835	840	845
Gly Ala Glu Asp Leu Gln Glu Ala Leu Ser Ser Ile Leu Gly Ile Leu		
850	855	860
Lys Ala Val Asn Asp Ser Met His Leu Ile Ala Ile Thr Gly Tyr Asp		
865	870	875
Gly Asn Leu Gly Asp Leu Gly Lys Leu Leu Met Gln Gly Ser Phe Ser		
885	890	895
Val Trp Thr Asp His Lys Arg Gly His Thr Lys Val Lys Glu Leu Ala		
900	905	910
Arg Phe Lys Pro Met Gln Arg His Leu Phe Leu His Glu Lys Ala Val		
915	920	925
Leu Phe Cys Lys Lys Arg Glu Glu Asn Gly Glu Gly Tyr Glu Lys Ala		
930	935	940
Pro Ser Tyr Ser Tyr Lys Gln Ser Leu Asn Met Ala Ala Val Gly Ile		
945	950	955
Thr Glu Asn Val Lys Gly Asp Ala Lys Lys Phe Glu Ile Trp Tyr Asn		
965	970	975
Ala Arg Glu Glu Val Tyr Ile Val Gln Ala Pro Thr Pro Glu Ile Lys		
980	985	990
Ala Ala Trp Val Asn Glu Ile Arg Lys Val Leu Thr Ser Gln Leu Gln		
995	1000	1005
Ala Cys Arg Glu Ala Ser Gln His Arg Ala Leu Glu Gln Ser Gln Ser		
1010	1015	1020
Leu Pro Leu Pro Ala Pro Thr Ser Thr Ser Pro Ser Arg Gly Asn Ser		
1025	1030	1035
Arg Asn Ile Lys Lys Leu Glu Glu Arg Lys Thr Asp Pro Leu Ser Leu		
1045	1050	1055
Glu Gly Tyr Val Ser Ser Ala Pro Leu Thr Lys Pro Pro Glu Lys Gly		
1060	1065	1070
Lys Gly Trp Ser Lys Thr Ser His Ser Leu Glu Ala Pro Glu Asp Asp		
1075	1080	1085
Gly Gly Trp Ser Ser Ala Glu Glu Gln Ile Asn Ser Ser Asp Ala Glu		
1090	1095	1100
Glu Asp Gly Gly Leu Gly Pro Lys Lys Leu Val Pro Gly Lys Tyr Thr		
1105	1110	1115
Val Val Ala Asp His Glu Lys Gly Gly Pro Asp Ala Leu Arg Val Arg		
1125	1130	1135
Ser Gly Asp Val Val Glu Leu Val Gln Glu Gly Asp Glu Gly Leu Trp		
1140	1145	1150
		1152

<210> 3484
 <211> 1968
 <212> PRT
 <213> Homo sapiens

<400> 3484
 Val Thr Met Ala Gln Gln Ala Ala Asp Lys Tyr Leu Tyr Val Asp Lys
 1 5 10 15
 Asn Phe Ile Asn Asn Pro Leu Ala Gln Ala Asp Trp Ala Ala Lys Lys
 20 25 30
 Leu Val Trp Val Pro Ser Asp Lys Ser Gly Phe Glu Pro Ala Ser Leu
 35 40 45
 Lys Glu Glu Val Gly Glu Glu Ala Ile Val Glu Leu Val Glu Asn Gly
 50 55 60
 Lys Lys Val Lys Val Asn Lys Asp Asp Ile Gln Lys Met Asn Pro Pro
 65 70 75 80
 Lys Phe Ser Lys Val Glu Asp Met Ala Glu Leu Thr Cys Leu Asn Glu
 85 90 95
 Ala Ser Val Leu His Asn Leu Lys Glu Arg Tyr Tyr Ser Gly Leu Ile
 100 105 110
 Tyr Thr Tyr Ser Gly Leu Phe Cys Val Val Ile Asn Pro Tyr Lys Asn
 115 120 125
 Leu Pro Ile Tyr Ser Glu Glu Ile Val Glu Met Tyr Lys Gly Lys Lys
 130 135 140
 Arg His Glu Met Pro Pro His Ile Tyr Ala Ile Thr Asp Thr Ala Tyr
 145 150 155 160
 Arg Ser Met Met Gln Asp Arg Glu Asp Gln Ser Ile Leu Cys Thr Gly
 165 170 175
 Glu Ser Gly Ala Gly Lys Thr Glu Asn Thr Lys Lys Val Ile Gln Tyr
 180 185 190
 Leu Ala Tyr Val Ala Ser Ser His Lys Ser Lys Lys Asp Gln Gly Glu
 195 200 205
 Leu Glu Arg Gln Leu Leu Gln Ala Asn Pro Ile Leu Glu Ala Phe Gly
 210 215 220
 Asn Ala Lys Thr Val Lys Asn Asp Asn Ser Ser Arg Phe Gly Lys Phe
 225 230 235 240
 Ile Arg Ile Asn Phe Asp Val Asn Gly Tyr Ile Val Gly Ala Asn Ile
 245 250 255
 Glu Thr Tyr Leu Leu Glu Lys Ser Arg Ala Ile Arg Gln Ala Lys Glu
 260 265 270
 Glu Arg Thr Phe His Ile Phe Tyr Tyr Leu Leu Ser Gly Ala Gly Glu
 275 280 285
 His Leu Lys Thr Asp Leu Leu Leu Glu Pro Tyr Asn Lys Tyr Arg Phe
 290 295 300
 Leu Ser Asn Gly His Val Thr Ile Pro Gly Gln Gln Asp Lys Asp Met
 305 310 315 320
 Phe Gln Glu Thr Met Glu Ala Met Arg Ile Met Gly Ile Pro Glu Glu
 325 330 335
 Glu Gln Met Gly Leu Leu Arg Val Ile Ser Gly Val Leu Gln Leu Gly
 340 345 350
 Asn Ile Val Phe Lys Lys Glu Arg Asn Thr Asp Gln Ala Ser Met Pro
 355 360 365
 Asp Asn Thr Ala Ala Gln Lys Val Ser His Leu Leu Gly Ile Asn Val
 370 375 380
 Thr Asp Phe Thr Arg Gly Ile Leu Thr Pro Arg Ile Lys Val Gly Arg
 385 390 395 400
 Asp Tyr Val Gln Lys Ala Gln Thr Lys Glu Gln Ala Asp Phe Ala Ile
 405 410 415
 Glu Ala Leu Ala Lys Ala Thr Tyr Glu Arg Met Phe Arg Trp Leu Val
 420 425 430
 Leu Arg Ile Asn Lys Ala Leu Asp Lys Thr Lys Arg Gln Gly Ala Ser
 435 440 445
 Phe Ile Gly Ile Leu Asp Ile Ala Gly Phe Glu Ile Phe Asp Leu Asn

450	455	460
Ser Phe Glu Gln Leu Cys	Ile Asn Tyr Thr Asn Glu Lys Leu Gln Gln	
465	470	475
Leu Phe Asn His Thr Met Phe	Ile Leu Glu Gln Glu Glu Tyr Gln Arg	480
	485	490
Glu Gly Ile Glu Trp Asn Phe	Ile Asp Phe Gly Leu Asp Leu Gln Pro	495
	500	505
Cys Ile Asp Leu Ile Glu Lys	Pro Ala Gly Pro Pro Gly Ile Leu Ala	510
	515	520
Leu Leu Asp Glu Glu Cys Trp	Phe Pro Lys Ala Thr Asp Lys Ser Phe	525
	530	535
Val Glu Lys Val Met Gln Glu	Gln Gly Thr His Pro Lys Phe Gln Lys	540
545	550	555
Pro Lys Gln Leu Lys Asp Lys	Ala Asp Phe Cys Ile Ile His Tyr Ala	560
	565	570
Gly Lys Val Asp Tyr Lys Ala	Asp Glu Trp Leu Met Lys Asn Met Asp	575
	580	585
Pro Leu Asn Asp Asn Ile Ala	Thr Leu Leu His Gln Ser Ser Asp Lys	590
	595	600
Phe Val Ser Glu Leu Trp Lys	Asp Val Asp Arg Ile Ile Gly Leu Asp	605
	610	615
Gln Val Ala Gly Met Ser Glu	Thr Ala Leu Pro Gly Ala Phe Lys Thr	620
625	630	635
Arg Lys Gly Met Phe Arg Thr	Val Gly Gln Leu Tyr Lys Glu Gln Leu	640
	645	650
Ala Lys Leu Met Ala Thr Leu	Arg Asn Thr Asn Pro Asn Phe Val Arg	655
	660	665
Cys Ile Ile Pro Asn His Glu	Lys Lys Ala Gly Lys Leu Asp Pro His	670
	675	680
Leu Val Leu Asp Gln Leu Arg	Cys Asn Gly Val Leu Glu Gly Ile Arg	685
	690	695
Ile Cys Arg Gln Gly Phe Pro	Asn Arg Val Val Phe Gln Glu Phe Arg	700
705	710	715
Gln Arg Tyr Glu Ile Leu Thr	Pro Asn Ser Ile Pro Lys Gly Phe Met	720
	725	730
Asp Gly Lys Gln Ala Cys Val	Leu Met Ile Lys Ala Leu Glu Leu Asp	735
	740	745
Ser Asn Leu Tyr Arg Ile Gly	Gln Ser Lys Val Phe Phe Arg Ala Gly	750
	755	760
Val Leu Ala His Leu Glu Glu	Arg Asp Leu Lys Ile Thr Asp Val	765
	770	775
Ile Ile Gly Phe Gln Ala Cys	Cys Arg Gly Tyr Leu Ala Arg Lys Ala	780
785	790	795
Phe Ala Lys Arg Gln Gln Gln	Leu Thr Ala Met Lys Val Leu Gln Arg	800
	805	810
Asn Cys Ala Ala Tyr Leu Lys	Leu Arg Asn Trp Gln Trp Trp Arg Leu	815
	820	825
Phe Thr Lys Val Lys Pro Leu	Leu Gln Val Ser Arg Gln Glu Glu Glu	830
	835	840
Met Met Ala Lys Glu Glu Glu	Leu Val Lys Val Arg Glu Lys Gln Leu	845
	850	855
Ala Ala Glu Asn Arg Leu Thr	Glu Met Glu Thr Leu Gln Ser Gln Leu	860
865	870	875
Met Ala Glu Lys Leu Gln Leu	Gln Glu Gln Ala Glu Thr Glu	880
	885	890
Leu Cys Ala Glu Ala Glu Glu	Leu Arg Ala Arg Leu Thr Ala Lys Lys	895
	900	905
Gln Glu Leu Glu Glu Ile Cys	His Asp Leu Glu Ala Arg Val Glu Glu	910
	915	920
Glu Glu Glu Arg Cys Gln His	Leu Gln Ala Glu Lys Lys Lys Met Gln	925
	930	935
Gln Asn Ile Gln Glu Leu Glu	Gln Glu Gln Leu Glu Glu Glu Ser Ala	940
945	950	955
Arg Gln Lys Leu Gln Leu Glu	Lys Val Thr Thr Glu Ala Lys Leu Lys	960

5207

1475	1480	1485
Glu Glu Ala Met Glu Gln Lys Ala Glu Leu Glu Arg Leu Asn Lys Gln		
1490	1495	1500
Phe Arg Thr Glu Met Glu Asp Leu Met Ser Ser Lys Asp Asp Val Gly		
1505	1510	1515
Lys Ser Val His Glu Leu Glu Lys Ser Lys Arg Ala Ile Glu Gln Gln		
1525	1530	1535
Val Glu Glu Met Lys Thr Gln Leu Glu Glu Leu Glu Asp Glu Leu Gln		
1540	1545	1550
Ala Thr Glu Asp Ala Lys Leu Arg Leu Glu Val Asn Leu Gln Ala Met		
1555	1560	1565
Lys Ala Gln Phe Glu Arg Asp Leu Gln Gly Arg Asp Glu Gln Ser Glu		
1570	1575	1580
Glu Lys Lys Lys Gln Leu Val Arg Gln Val Arg Glu Met Glu Ala Glu		
1585	1590	1595
Leu Glu Asp Glu Arg Lys Gln Arg Ser Met Ala Val Ala Ala Arg Lys		
1605	1610	1615
Lys Leu Glu Met Asp Leu Lys Asp Leu Glu Ala His Ile Asp Ser Ala		
1620	1625	1630
Asn Lys Asn Arg Asp Glu Ala Ile Lys Gln Leu Arg Lys Leu Gln Ala		
1635	1640	1645
Gln Met Lys Asp Cys Met Arg Glu Leu Asp Asp Thr Arg Ala Ser Arg		
1650	1655	1660
Glu Glu Ile Leu Ala Gln Ala Lys Glu Asn Glu Lys Lys Leu Lys Ser		
1665	1670	1675
Met Glu Ala Glu Met Ile Gln Leu Gln Glu Leu Ala Ala Ala Glu		
1685	1690	1695
Arg Ala Lys Arg Gln Ala Gln Gln Glu Arg Asp Glu Leu Ala Asp Glu		
1700	1705	1710
Ile Ala Asn Ser Ser Gly Lys Gly Ala Leu Ala Leu Glu Glu Lys Arg		
1715	1720	1725
Arg Leu Glu Ala Arg Ile Ala Gln Leu Glu Glu Glu Leu Glu Glu Glu		
1730	1735	1740
Gln Gly Asn Thr Glu Leu Ile Asn Asp Arg Leu Lys Lys Ala Asn Leu		
1745	1750	1755
Gln Ile Asp Gln Ile Asn Thr Asp Leu Asn Leu Glu Arg Ser His Ala		
1765	1770	1775
Gln Lys Asn Glu Asn Ala Arg Gln Gln Leu Glu Arg Gln Asn Lys Glu		
1780	1785	1790
Leu Lys Val Lys Leu Gln Glu Met Glu Gly Thr Val Lys Ser Lys Tyr		
1795	1800	1805
Lys Ala Ser Ile Thr Ala Leu Glu Ala Lys Ile Ala Gln Leu Glu Glu		
1810	1815	1820
Gln Leu Asp Asn Glu Thr Lys Glu Arg Gln Ala Ala Cys Lys Gln Val		
1825	1830	1835
Arg Arg Thr Glu Lys Lys Leu Lys Asp Val Leu Leu Gln Val Asp Asp		
1845	1850	1855
Glu Arg Arg Asn Ala Glu Gln Tyr Lys Asp Gln Ala Asp Lys Ala Ser		
1860	1865	1870
Thr Arg Leu Lys Gln Leu Lys Arg Gln Leu Glu Glu Ala Glu Glu Glu		
1875	1880	1885
Ala Gln Arg Ala Asn Ala Ser Arg Arg Lys Leu Gln Arg Glu Leu Glu		
1890	1895	1900
Asp Ala Thr Glu Thr Ala Asp Ala Met Asn Arg Glu Val Ser Ser Leu		
1905	1910	1915
Lys Asn Lys Leu Arg Arg Gly Asp Leu Pro Phe Val Val Pro Arg Arg		
1925	1930	1935
Met Ala Arg Lys Gly Ala Gly Asp Gly Ser Asp Glu Glu Val Asp Gly		
1940	1945	1950
Lys Ala Asp Gly Ala Glu Ala Lys Pro Ala Glu		
1955	1960	1963

<210> 3485
 <211> 595
 <212> PRT
 <213> Homo sapiens

<400> 3485
 Cys Ser Thr Gly Val Ser Lys Ala Pro Leu Thr Tyr Leu Met Ser Tyr
 1 5 10 15
 Gly Phe Glu Leu Gly Trp Arg Lys Gly Asn Arg Ala Val Ala Cys Arg
 20 25 30
 Glu Asp Arg Gly Gly Glu Ser Val Gly Met Gly Gln Glu Ser Ile Leu
 35 40 45
 Ser Gln Val His Trp Trp Glu Ala Glu Pro Val Glu Lys Thr Pro Gly
 50 55 60
 Arg Asp Ser Glu Ala Thr Ile Met Ser Leu Arg Val His Thr Leu Pro
 65 70 75 80
 Thr Leu Leu Gly Ala Val Val Arg Pro Gly Cys Arg Glu Leu Leu Cys
 85 90 95
 Leu Leu Met Ile Thr Val Thr Val Gly Pro Gly Ala Ser Gly Val Cys
 100 105 110
 Pro Thr Ala Cys Ile Cys Ala Thr Asp Ile Val Ser Cys Thr Asn Lys
 115 120 125
 Asn Leu Ser Lys Val Pro Gly Asn Leu Phe Arg Leu Ile Lys Arg Leu
 130 135 140
 Asp Leu Ser Tyr Asn Arg Ile Gly Leu Leu Asp Ser Glu Trp Ile Pro
 145 150 155 160
 Val Ser Phe Ala Lys Leu Asn Thr Leu Ile Leu Arg His Asn Asn Ile
 165 170 175
 Thr Ser Ile Ser Thr Gly Ser Phe Ser Thr Thr Pro Asn Leu Lys Cys
 180 185 190
 Leu Asp Leu Ser Ser Asn Lys Leu Lys Thr Val Lys Asn Ala Val Phe
 195 200 205
 Gln Glu Leu Lys Val Leu Glu Val Leu Leu Leu Tyr Asn Asn His Ile
 210 215 220
 Ser Tyr Leu Asp Pro Ser Ala Phe Gly Gly Leu Ser Gln Leu Gln Lys
 225 230 235 240
 Leu Tyr Leu Ser Gly Asn Phe Leu Thr Gln Phe Pro Met Asp Leu Tyr
 245 250 255
 Val Gly Arg Phe Lys Leu Ala Glu Leu Met Phe Leu Asp Val Ser Tyr
 260 265 270
 Asn Arg Ile Pro Ser Met Pro Met His His Ile Asn Leu Val Pro Gly
 275 280 285
 Lys Gln Leu Arg Gly Ile Tyr Leu His Gly Asn Pro Phe Val Cys Asp
 290 295 300
 Cys Ser Leu Val Ser Leu Leu Val Phe Trp Tyr Arg Arg His Phe Ser
 305 310 315 320
 Ser Val Met Asp Phe Lys Asn Asp Tyr Thr Cys Arg Leu Trp Ser Asp
 325 330 335
 Ser Arg His Ser Arg Gln Val Leu Leu Leu Gln Asp Ser Phe Met Asn
 340 345 350
 Cys Ser Asp Ser Ile Ile Asn Gly Ser Phe Arg Ala Leu Gly Phe Ile
 355 360 365
 His Glu Ala Gln Val Gly Glu Arg Leu Met Val His Cys Asp Ser Lys
 370 375 380
 Thr Gly Asn Ala Asn Thr Asp Phe Ile Trp Val Gly Pro Asp Asn Arg
 385 390 395 400
 Leu Leu Glu Pro Asp Lys Glu Met Glu Asn Phe Tyr Val Phe His Asn
 405 410 415
 Gly Ser Leu Val Ile Glu Ser Pro Arg Phe Glu Asp Ala Gly Val Tyr
 420 425 430
 Ser Cys Ile Ala Met Asn Lys Gln Arg Leu Leu Asn Glu Thr Val Asp
 435 440 445
 Val Thr Ile Asn Val Ser Asn Phe Thr Val Ser Arg Ser His Ala His

450	455	460
Glu Ala Phe Asn Thr Ala Phe Thr Thr Leu Ala Ala Cys Val Ala Ser		
465	470	475
Ile Val Leu Val Leu Leu Tyr Leu Tyr Leu Thr Pro Cys Pro Cys Lys		480
	485	490
Cys Lys Thr Lys Arg Gln Lys Asn Met Leu His Gln Ser Asn Ala His		495
	500	505
Ser Ser Ile Leu Ser Pro Gly Pro Ala Ser Asp Ala Ser Ala Asp Glu		510
	515	520
Arg Lys Ala Gly Ala Gly Lys Arg Val Val Phe Leu Glu Pro Leu Lys		525
	530	535
Asp Thr Ala Ala Gly Gln Asn Gly Lys Val Arg Leu Phe Pro Ser Glu		540
545	550	555
Ala Val Ile Ala Glu Gly Ile Leu Lys Ser Thr Arg Gly Lys Ser Asp		560
	565	570
Ser Asp Ser Val Asn Ser Val Phe Ser Asp Thr Pro Phe Val Ala Ser		575
	580	585
		590
Thr		
593		

<210> 3486
 <211> 273
 <212> PRT
 <213> Homo sapiens

<400> 3486
Gly Asp Pro Arg Glu Thr Lys Val Phe Pro Ser Arg Ser Phe Ala Arg
1 5 10 15
Asn Thr Val Gly Val Ser His His Gln Ser His Leu Phe His Thr Val
20 25 30
Ser Arg Ile Tyr Val Glu Asp Lys His Lys Ile Leu Tyr Cys Glu Val
35 40 45
Pro Lys Ala Gly Cys Ser Asn Trp Lys Arg Ile Leu Met Val Leu Asn
50 55 60
Gly Leu Ala Ser Ser Ala Tyr Asn Ile Ser His Asn Ala Val His Tyr
65 70 75 80
Gly Lys His Leu Lys Lys Leu Asp Ser Phe Asp Leu Lys Gly Ile Tyr
85 90 95
Thr Arg Leu Asp Thr Tyr Thr Lys Leu Val Leu Val Arg Asp Pro Met
100 105 110
Glu Arg Leu Val Ser Ala Phe Arg Asp Lys Phe Asp His Pro Asn Ser
115 120 125
Tyr Tyr His Pro Val Phe Gly Lys Ala Ile Ile Lys Lys Tyr Arg Pro
130 135 140
Asn Ala Cys Glu Glu Ala Leu Ile Asn Gly Ser Gly Val Lys Phe Lys
145 150 155 160
Glu Phe Ile His Tyr Leu Leu Asp Ser His Arg Pro Val Gly Met Asp
165 170 175
Ile His Trp Glu Lys Val Ser Lys Leu Cys Tyr Pro Cys Leu Ile Asn
180 185 190
Tyr Asp Phe Val Gly Lys Phe Glu Thr Leu Glu Glu Asp Ala Asn Tyr
195 200 205
Phe Leu Gln Met Ile Gly Ala Pro Lys Glu Leu Lys Phe Pro Asn Phe
210 215 220
Lys Asp Arg His Ser Ser Asp Glu Arg Thr Asn Ala Gln Val Val Arg
225 230 235 240
Gln Tyr Leu Lys Asp Leu Thr Arg Thr Glu Arg Gln Leu Ile Tyr Asp
245 250 255
Phe Tyr Tyr Leu Asp Tyr Leu Met Phe Asn Tyr Thr Thr Pro Phe Leu
260 265 270 272

<210> 3487
 <211> 1093
 <212> PRT
 <213> Homo sapiens

<400> 3487
 Cys Asp Lys Ser Gly Ala Val Pro Phe Ser Thr Thr Arg Ser Pro Arg
 1 5 10 15
 Arg Pro Ser Pro Arg Ser Ala Gly Pro Ser Leu Ser Ser Val Ser Pro
 20 25 30
 Arg Ser Gln Leu Trp Ala Ser Ser Gly Leu Ser Glu Glu His Ala Ala
 35 40 45
 Pro Leu Leu Pro Ala Trp Pro Arg His Pro Cys Pro Pro Ser Leu Thr
 50 55 60
 Pro Gly Pro Ser Met Ala Gln Gly Ala Met Arg Phe Cys Ser Glu Gly
 65 70 75 80
 Asp Cys Ala Ile Ser Pro Pro Arg Cys Pro Arg Arg Trp Leu Pro Glu
 85 90 95
 Gly Pro Val Pro Gln Ser Pro Pro Ala Ser Met Tyr Gly Ser Thr Gly
 100 105 110
 Ser Leu Leu Arg Arg Val Ala Gly Pro Gly Pro Arg Gly Arg Glu Leu
 115 120 125
 Gly Arg Val Thr Ala Pro Cys Thr Pro Leu Arg Gly Pro Pro Ser Pro
 130 135 140
 Arg Val Ala Pro Ser Pro Trp Ala Pro Ser Ser Pro Thr Gly Gln Pro
 145 150 155 160
 Pro Pro Gly Ala Gln Ser Ser Val Val Ile Phe Arg Phe Val Glu Lys
 165 170 175
 Ala Ser Val Arg Pro Leu Asn Gly Leu Pro Ala Pro Gly Gly Leu Ser
 180 185 190
 Arg Ser Trp Asp Leu Gly Gly Val Ser Pro Pro Arg Pro Thr Pro Ala
 195 200 205
 Leu Gly Pro Gly Ser Asn Arg Lys Leu Arg Leu Glu Ala Ser Thr Ser
 210 215 220
 Asp Pro Leu Pro Ala Arg Gly Gly Ser Ala Leu Pro Gly Ser Arg Asn
 225 230 235 240
 Leu Val His Gly Pro Pro Ala Pro Pro Gln Val Gly Ala Asp Gly Leu
 245 250 255
 Tyr Ser Ser Leu Pro Asn Gly Leu Gly Asp Pro Pro Glu Arg Leu Ala
 260 265 270
 Thr Leu Phe Gly Gly Pro Ala Asp Thr Gly Phe Leu Asn Gln Gly Asp
 275 280 285
 Thr Trp Ser Ser Pro Arg Glu Val Ser Ser His Ala Gln Arg Ile Ala
 290 295 300
 Arg Ala Lys Trp Glu Phe Phe Tyr Gly Ser Leu Asp Pro Pro Ser Ser
 305 310 315 320
 Gly Ala Lys Pro Pro Glu Gln Ala Pro Pro Ser Pro Pro Gly Val Gly
 325 330 335
 Ser Arg Gln Gly Ser Gly Val Ala Val Gly Arg Ala Ala Lys Tyr Ser
 340 345 350
 Glu Thr Asp Leu Asp Thr Val Pro Leu Arg Cys Tyr Arg Glu Thr Asp
 355 360 365
 Ile Asp Glu Val Leu Ala Glu Arg Glu Glu Ala Asp Ser Ala Ile Glu
 370 375 380
 Ser Gln Pro Ser Ser Glu Gly Pro Pro Gly Thr Ala Tyr Pro Pro Ala
 385 390 395 400
 Pro Arg Pro Gly Pro Leu Pro Gly Pro His Pro Ser Leu Gly Ser Gly
 405 410 415
 Asn Glu Asp Glu Asp Asp Asp Glu Ala Gly Gly Glu Glu Asp Val Asp

5212

930	935	940
Pro Ala Ala Val Ser Ser Gln Lys Lys Phe Ser Arg Pro Leu Leu Pro		
945	950	955
Ser Ala Ala Thr Arg Leu Ser Gln Glu Glu Gln Val Arg Thr His Glu		960
	965	970
Ala Lys Leu Lys Ala Met Ala Ser Glu Leu Arg Glu His Arg Ala Ala		975
	980	985
Gln Leu Gly Lys Lys Gly Arg Gly Lys Glu Ala Glu Glu Gln Arg Gln		990
	995	1000
Lys Glu Ala Tyr Leu Glu Phe Glu Lys Ser Arg Tyr Ser Thr Tyr Ala		1005
	1010	1015
Ala Leu Leu Arg Val Lys Leu Lys Ala Gly Ser Glu Glu Leu Asp Ala		1020
1025	1030	1035
Val Glu Ala Ala Leu Ala Gln Ala Gly Ser Thr Glu Asp Gly Leu Pro		1040
	1045	1050
Pro Ser His Ser Ser Pro Ser Leu Gln Pro Lys Pro Ser Ser Gln Pro		1055
	1060	1065
Arg Ala Gln Arg His Ser Ser Glu Pro Arg Pro Gly Ala Gly Ser Gly		1070
	1075	1080
Arg Arg Lys Pro		1085
1090	1092	

<210> 3488

<211> 510

<212> PRT

<213> Homo sapiens

<400> 3488

Gly Thr Glu Thr Pro His Cys Trp Gly Arg Gly Thr Ala Gly Leu Arg		
1	5	10
Arg Glu Leu Asp Arg Glu Glu Arg Asp Gly Pro Gly Thr Ala Thr Met		15
	20	25
Ser Phe Pro His Phe Gly His Pro Tyr Arg Gly Ala Phe Gln Phe Leu		30
	35	40
Ala Ser Ala Ser Ser Ser Thr Thr Cys Cys Glu Ser Thr Leu Arg Ser		45
	50	55
Val Ser Tyr Val Ala Ser Gly Ser Thr Pro Ala Pro Ala Leu Cys Cys		60
	65	70
Ala Pro Tyr Asp Ser Arg Leu Leu Gly Ser Ala Arg Pro Glu Leu Gly		75
	85	90
Ala Ala Leu Gly Ile Tyr Gly Ala Pro Tyr Ala Ala Ala Ala Ala		95
	100	105
Gln Ser Tyr Pro Gly Tyr Leu Pro Tyr Ser Pro Glu Pro Pro Ser Leu		110
	115	120
Tyr Gly Ala Leu Asn Pro Gln Tyr Glu Phe Lys Glu Ala Ala Gly Ser		125
	130	135
Phe Thr Ser Ser Leu Ala Gln Pro Gly Ala Tyr Tyr Pro Tyr Glu Arg		140
	145	150
Thr Leu Gly Gln Tyr Gln Tyr Glu Arg Tyr Gly Ala Val Glu Leu Ser		155
	165	170
Gly Ala Gly Arg Arg Lys Asn Ala Thr Arg Glu Thr Thr Ser Thr Leu		175
	180	185
Lys Ala Trp Leu Asn Glu His Arg Lys Asn Pro Tyr Pro Thr Lys Gly		190
	195	200
Glu Lys Ile Met Leu Ala Ile Ile Thr Lys Met Thr Leu Thr Gln Val		205
	210	215
Ser Thr Trp Phe Ala Asn Ala Arg Arg Arg Leu Lys Lys Glu Asn Lys		220
	225	230
Met Thr Trp Ala Pro Lys Asn Lys Gly Gly Glu Glu Arg Lys Ala Glu		235
	245	250
Gly Gly Glu Glu Asp Ser Leu Gly Cys Leu Thr Ala Asp Thr Lys Glu		255

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      260      265      270
Val Thr Ala Ser Gln Glu Ala Arg Gly Leu Arg Leu Ser Asp Leu Glu
      275      280      285
Asp Leu Glu Glu Glu Glu Glu Glu Glu Glu Ala Glu Asp Glu Glu
      290      295      300
Val Val Ala Thr Ala Gly Asp Arg Leu Thr Glu Phe Arg Lys Gly Ala
      305      310      315      320
Gln Ser Leu Pro Gly Pro Cys Ala Ala Ala Arg Glu Gly Arg Leu Glu
      325      330      335
Arg Arg Glu Cys Gly Leu Ala Ala Pro Arg Phe Ser Phe Asn Asp Pro
      340      345      350
Ser Gly Ser Glu Glu Ala Asp Phe Leu Ser Ala Glu Thr Gly Ser Pro
      355      360      365
Arg Leu Thr Met His Tyr Pro Cys Leu Glu Lys Pro Arg Ile Trp Ser
      370      375      380
Leu Ala His Thr Ala Thr Ala Ser Ala Val Glu Gly Ala Pro Pro Ala
      385      390      395      400
Arg Pro Arg Pro Arg Ser Pro Glu Cys Arg Met Ile Pro Gly Gln Pro
      405      410      415
Pro Ala Ser Ala Arg Arg Leu Ser Val Pro Arg Asp Ser Ala Cys Asp
      420      425      430
Glu Ser Ser Cys Ile Pro Lys Ala Phe Gly Asn Pro Lys Phe Ala Leu
      435      440      445
Gln Gly Leu Pro Leu Asn Cys Ala Pro Cys Pro Arg Arg Ser Glu Pro
      450      455      460
Val Val Gln Cys Gln Tyr Pro Ser Gly Ala Glu Gly Ser Gly Pro Pro
      465      470      475      480
Ala Ala Leu Gly Val Ser Met Gln Lys Thr Pro Thr Tyr Arg Pro Ala
      485      490      495
Arg Gln Leu His Thr Leu Cys His Ser Ser Leu Pro
      500      505      508

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<210> 3489

<211> 452

<212> PRT

<213> Homo sapiens

<400> 3489

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Ile Ala Ala Tyr His Lys Ala Leu Ser Tyr Arg Gly His Val His Ala
  1      5      10      15
Asn Asn Arg Gly Thr Asn Asn Val His Phe Thr Pro Pro Pro Ser Pro
      20      25      30
Ser Arg Gly Ile Leu Pro Met Asn Pro Arg Asn Met Met Asn His Ser
      35      40      45
Gln Val Gly Gln Gly Ile Gly Ile Pro Ser Arg Thr Asn Ser Met Ser
      50      55      60
Ser Ser Gly Leu Gly Ser Pro Asn Arg Ser Ser Pro Ser Ile Ile Cys
      65      70      75      80
Met Pro Lys Gln Gln Pro Ser Arg Gln Pro Phe Thr Val Asn Ser Met
      85      90      95
Ser Gly Phe Gly Met Asn Arg Asn Gln Ala Phe Gly Met Asn Asn Ser
      100      105      110
Leu Ser Ser Asn Ile Phe Asn Gly Thr Asp Gly Ser Glu Asn Val Thr
      115      120      125
Gly Leu Asp Leu Ser Asp Phe Pro Ala Leu Ala Asp Arg Asn Arg Arg
      130      135      140
Glu Gly Ser Gly Asn Pro Thr Pro Leu Ile Asn Pro Leu Ala Gly Arg
      145      150      155      160
Ala Pro Tyr Val Gly Met Val Thr Lys Pro Ala Asn Glu Gln Ser Gln
      165      170      175
Asp Phe Ser Ile His Asn Glu Asp Phe Pro Ala Leu Pro Gly Ser Ser

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<210> 3490
<211> 944
<212> PRT
<213> Homo sapiens
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<400> 3490															
Phe	Val	Ala	Lys	Met	Ala	Thr	Ser	Gln	Tyr	Phe	Asp	Phe	Ala	Gln	Gly
1				5					10					15	
Gly	Gly	Pro	Gln	Tyr	Ser	Thr	Gln	Ala	Pro	Thr	Leu	Pro	Leu	Pro	Thr
			20					25					30		
Val	Gly	Ala	Ser	Tyr	Thr	Gly	Gln	Pro	Thr	Pro	Gly	Met	Asp	Pro	Ala
		35					40					45			
Val	Asn	Pro	Ala	Phe	Pro	Pro	Ala	Ala	Pro	Ala	Gly	Tyr	Gly	Gly	Tyr
	50					55					60				
Gln	Pro	His	Ser	Gly	Gln	Asp	Phe	Ala	Tyr	Gly	Ser	Arg	Pro	Gln	Glu
65					70					75					80
Pro	Val	Pro	Thr	Ala	Thr	Thr	Met	Ala	Thr	Tyr	Gln	Asp	Ser	Tyr	Ser
				85					90					95	
Tyr	Gly	Gln	Ser	Ala	Ala	Ala	Arg	Ser	Tyr	Glu	Asp	Arg	Pro	Tyr	Phe
			100					105					110		
Gln	Ser	Ala	Ala	Leu	Gln	Ser	Gly	Arg	Met	Thr	Ala	Ala	Asp	Ser	Gly
		115					120					125			
Gln	Pro	Gly	Thr	Gln	Glu	Ala	Cys	Gly	Gln	Pro	Ser	Pro	His	Gly	Ser
	130					135					140				
His	Ser	His	Ala	Gln	Pro	Pro	Gln	Gln	Ala	Pro	Ile	Val	Glu	Ser	Gly

145		150		155		160									
Gln	Pro	Ala	Ser	Thr	Leu	Ser	Ser	Gly	Tyr	Thr	Tyr	Pro	Thr	Ala	Thr
				165					170					175	
Gly	Val	Gln	Pro	Glu	Ser	Ser	Ala	Ser	Ile	Val	Thr	Ser	Tyr	Pro	Pro
				180					185					190	
Pro	Ser	Tyr	Asn	Pro	Thr	Cys	Thr	Ala	Tyr	Thr	Ala	Pro	Ser	Tyr	Pro
		195					200					205			
Asn	Tyr	Asp	Ala	Ser	Val	Tyr	Ser	Ala	Ala	Ser	Pro	Phe	Tyr	Pro	Pro
		210					215				220				
Ala	Gln	Pro	Pro	Pro	Pro	Pro	Gly	Pro	Pro	Gln	Gln	Leu	Pro	Pro	Pro
225						230				235				240	
Pro	Ala	Pro	Ala	Gly	Ser	Gly	Ser	Ser	Pro	Arg	Ala	Asp	Ser	Lys	Pro
				245					250					255	
Pro	Leu	Pro	Ser	Lys	Leu	Pro	Arg	Pro	Lys	Ala	Gly	Pro	Arg	Gln	Leu
			260					265					270		
Gln	Leu	His	Tyr	Cys	Asp	Ile	Cys	Lys	Ile	Ser	Cys	Ala	Gly	Pro	Gln
		275					280					285			
Thr	Tyr	Arg	Glu	His	Leu	Gly	Gly	Gln	Lys	His	Arg	Lys	Lys	Glu	Ala
		290					295				300				
Ala	Gln	Lys	Thr	Gly	Val	Gln	Pro	Asn	Gly	Ser	Pro	Arg	Gly	Val	Gln
305						310				315				320	
Ala	Gln	Leu	His	Cys	Asp	Leu	Cys	Ala	Val	Ser	Cys	Thr	Gly	Ala	Asp
				325					330					335	
Ala	Tyr	Ala	Ala	His	Ile	Arg	Gly	Ser	Lys	His	Gln	Lys	Val	Phe	Lys
			340					345					350		
Leu	His	Ala	Lys	Leu	Gly	Lys	Pro	Ile	Pro	Thr	Leu	Glu	Pro	Ala	Leu
		355					360					365			
Ala	Thr	Glu	Ser	Pro	Pro	Gly	Ala	Glu	Ala	Lys	Pro	Thr	Ser	Pro	Thr
		370				375					380				
Gly	Pro	Ser	Val	Cys	Ala	Ser	Ser	Arg	Pro	Ala	Leu	Ala	Lys	Arg	Pro
385					390					395				400	
Val	Ala	Ser	Lys	Ala	Leu	Cys	Glu	Gly	Pro	Pro	Glu	Pro	Gln	Ala	Ala
				405					410					415	
Gly	Cys	Arg	Pro	Gln	Trp	Gly	Lys	Pro	Ala	Gln	Pro	Lys	Leu	Glu	Gly
			420					425					430		
Pro	Gly	Ala	Pro	Thr	Gln	Gly	Gly	Ser	Lys	Glu	Ala	Pro	Ala	Gly	Cys
		435				440						445			
Ser	Asp	Ala	Gln	Pro	Val	Gly	Pro	Glu	Tyr	Val	Glu	Glu	Val	Phe	Ser
		450				455					460				
Asp	Glu	Gly	Arg	Val	Leu	Arg	Phe	His	Cys	Lys	Leu	Cys	Glu	Cys	Ser
465					470					475				480	
Phe	Asn	Asp	Leu	Asn	Ala	Lys	Asp	Leu	His	Val	Arg	Gly	Arg	Arg	His
				485				490						495	
Arg	Leu	Gln	Tyr	Arg	Lys	Lys	Val	Asn	Pro	Asp	Leu	Pro	Ile	Ala	Thr
			500					505					510		
Glu	Pro	Ser	Arg	Ala	Arg	Lys	Val	Leu	Glu	Glu	Arg	Met	Arg	Lys	
		515				520					525				
Gln	Arg	His	Leu	Ala	Glu	Glu	Arg	Leu	Glu	Gln	Leu	Arg	Arg	Trp	His
		530				535					540				
Ala	Glu	Arg	Arg	Arg	Leu	Glu	Glu	Glu	Pro	Pro	Gln	Asp	Val	Pro	Pro
545					550					555				560	
His	Ala	Pro	Pro	Asp	Trp	Ala	Gln	Pro	Leu	Leu	Met	Gly	Arg	Pro	Glu
				565				570						575	
Ser	Pro	Ala	Ser	Ala	Pro	Leu	Gln	Pro	Gly	Arg	Arg	Pro	Ala	Ser	Ser
			580					585					590		
Asp	Asp	Arg	His	Val	Met	Cys	Lys	His	Ala	Thr	Ile	Tyr	Pro	Thr	Glu
		595					600					605			
Gln	Glu	Leu	Leu	Ala	Val	Gln	Arg	Ala	Val	Ser	His	Ala	Glu	Arg	Ala
		610				615					620				
Leu	Lys	Leu	Val	Ser	Asp	Thr	Leu	Ala	Glu	Glu	Asp	Arg	Gly	Arg	Arg
625					630					635				640	
Glu	Glu	Glu	Gly	Asp	Lys	Arg	Ser	Ser	Val	Ala	Pro	Gln	Thr	Arg	Val
				645					650					655	
Leu	Lys	Gly	Val	Met	Arg	Val	Gly	Ile	Leu	Ala	Lys	Gly	Leu	Leu	Leu

660					665					670					
Arg	Gly	Asp	Arg	Asn	Val	Arg	Leu	Ala	Leu	Leu	Cys	Ser	Glu	Lys	Pro
675					680					685					
Thr	His	Ser	Leu	Leu	Arg	Arg	Ile	Ala	Gln	Gln	Leu	Pro	Arg	Gln	Leu
690					695					700					
Gln	Met	Val	Thr	Glu	Asp	Glu	Tyr	Glu	Val	Ser	Ser	Asp	Pro	Glu	Ala
705					710					715					
Asn	Ile	Val	Ile	Ser	Ser	Cys	Glu	Glu	Pro	Arg	Met	Gln	Val	Thr	Ile
725					730					735					
Ser	Val	Thr	Ser	Pro	Leu	Met	Arg	Glu	Asp	Pro	Ser	Thr	Asp	Pro	Gly
740					745					750					
Val	Glu	Glu	Pro	Gln	Ala	Asp	Ala	Gly	Asp	Val	Leu	Ser	Pro	Lys	Lys
755					760					765					
Cys	Leu	Glu	Ser	Leu	Ala	Ala	Leu	Arg	His	Ala	Arg	Trp	Phe	Gln	Ala
770					775					780					
Arg	Ala	Ser	Gly	Leu	Gln	Pro	Cys	Val	Ile	Val	Ile	Arg	Val	Leu	Arg
785					790					795					
Asp	Leu	Cys	Arg	Arg	Val	Pro	Thr	Trp	Gly	Ala	Leu	Pro	Ala	Trp	Ala
805					810					815					
Met	Glu	Leu	Leu	Val	Glu	Lys	Ala	Val	Ser	Ser	Ala	Ala	Gly	Pro	Leu
820					825					830					
Gly	Pro	Gly	Asp	Ala	Val	Arg	Arg	Val	Leu	Glu	Cys	Val	Ala	Thr	Gly
835					840					845					
Thr	Leu	Leu	Thr	Asp	Gly	Pro	Gly	Leu	Gln	Asp	Pro	Cys	Glu	Arg	Asp
850					855					860					
Gln	Thr	Asp	Ala	Leu	Glu	Pro	Met	Thr	Leu	Gln	Glu	Arg	Glu	Asp	Val
865					870					875					
Thr	Ala	Ser	Ala	Gln	His	Ala	Leu	Arg	Met	Leu	Ala	Phe	Arg	Gln	Thr
885					890					895					
His	Lys	Val	Leu	Gly	Met	Asp	Leu	Leu	Pro	Pro	Arg	His	Arg	Leu	Gly
900					905					910					
Ala	Arg	Phe	Arg	Lys	Arg	Gln	Arg	Gly	Pro	Gly	Glu	Gly	Glu	Glu	Gly
915					920					925					
Ala	Gly	Glu	Lys	Lys	Arg	Gly	Arg	Arg	Gly	Gly	Glu	Gly	Leu	Val	
930					935					940					
										943					

<210> 3491

<211> 441

<212> PRT

<213> Homo sapiens

<400> 3491

Phe	Val	Gly	Asp	Gly	Ala	Leu	Ser	Gly	Cys	Arg	Arg	Gly	Arg	Ala	Pro
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Arg	Val	Pro	Ser	Met	Ala	Gly	Ser	Leu	Pro	Pro	Cys	Val	Val	Asp	Cys
			20					25					30		
Gly	Thr	Gly	Tyr	Thr	Lys	Leu	Gly	Tyr	Ala	Gly	Asn	Thr	Glu	Pro	Gln
			35				40					45			
Phe	Ile	Ile	Pro	Ser	Cys	Ile	Ala	Ile	Arg	Glu	Ser	Ala	Lys	Val	Val
			50				55				60				
Asp	Gln	Ala	Gln	Arg	Arg	Val	Leu	Arg	Gly	Val	Asp	Asp	Leu	Asp	Phe
			65			70				75					80
Phe	Ile	Gly	Asp	Glu	Ala	Ile	Asp	Lys	Pro	Thr	Tyr	Ala	Thr	Lys	Trp
			85					90						95	
Pro	Ile	Arg	His	Gly	Ile	Ile	Glu	Asp	Trp	Asp	Leu	Met	Glu	Arg	Phe
			100					105					110		
Met	Glu	Gln	Val	Val	Phe	Lys	Tyr	Leu	Arg	Ala	Glu	Pro	Glu	Asp	His
			115				120					125			
Tyr	Phe	Leu	Met	Thr	Glu	Pro	Pro	Leu	Asn	Thr	Pro	Glu	Asn	Arg	Glu
			130			135					140				
Tyr	Leu	Ala	Glu	Ile	Met	Phe	Glu	Ser	Phe	Asn	Val	Pro	Gly	Leu	Tyr

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145          150          155          160
Ile Ala Val Gln Ala Val Leu Ala Leu Ala Ala Ser Trp Thr Ser Arg
          165          170          175
Gln Val Gly Glu Arg Thr Leu Thr Gly Ile Val Ile Asp Ser Gly Asp
          180          185          190
Gly Val Thr His Val Ile Pro Val Ala Glu Gly Tyr Val Ile Gly Ser
          195          200          205
Cys Ile Lys His Ile Pro Ile Ala Gly Arg Asp Ile Thr Tyr Phe Ile
          210          215          220
Gln Gln Leu Leu Arg Glu Arg Glu Val Gly Ile Pro Pro Glu Gln Ser
225          230          235          240
Leu Glu Thr Ala Lys Ala Ile Lys Glu Lys Tyr Cys Tyr Ile Cys Pro
          245          250          255
Asp Ile Val Lys Glu Phe Ala Lys Tyr Asp Val Asp Pro Arg Lys Trp
          260          265          270
Ile Lys Gln Tyr Thr Gly Ile Asn Ala Ile Asn Gln Lys Lys Phe Val
          275          280          285
Ile Asp Val Gly Tyr Glu Arg Phe Leu Gly Pro Glu Ile Phe Phe His
290          295          300
Pro Glu Phe Ala Asn Pro Asp Phe Met Glu Ser Ile Ser Asp Val Val
305          310          315          320
Asp Glu Val Ile Gln Asn Cys Pro Ile Asp Val Arg Arg Pro Leu Tyr
          325          330          335
Lys Asn Val Val Leu Ser Gly Gly Ser Thr Met Phe Arg Asp Phe Gly
          340          345          350
Arg Arg Leu Gln Arg Asp Leu Lys Arg Val Val Asp Ala Arg Leu Arg
          355          360          365
Leu Ser Glu Glu Leu Ser Gly Gly Arg Ile Lys Pro Lys Pro Val Glu
370          375          380
Val Gln Val Val Thr His His Met Gln Arg Tyr Ala Val Trp Phe Gly
385          390          395          400
Gly Ser Met Leu Ala Ser Thr Pro Glu Phe Phe Gln Val Cys His Thr
          405          410          415
Lys Lys Asp Tyr Glu Glu Tyr Gly Pro Ser Ile Cys Arg His Asn Pro
          420          425          430
Val Phe Gly Val Met Ser
          435          438

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<210> 3492

<211> 674

<212> PRT

<213> Homo sapiens

<400> 3492

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Pro Asn Gly Val Ala Leu Leu His Leu Pro Gly Ala Ala Val Ile Pro
  1          5          10          15
Asn Thr Asn Tyr Met Phe Gln Asp Ala Leu Gly Gly Arg Ser Arg Gly
          20          25          30
Ser Arg Glu Glu Ser Pro Ala Pro Ser Arg Ala Pro Ala Ser Ala Ser
          35          40          45
Leu Trp Arg Arg Leu Val Val Val Glu Ala Lys Met Ala Ala His Ala
          50          55          60
Ala Ala Ala Ala Gln Ala Ala Ala Gln Ala Ala His Ala Glu Ala
          65          70          75          80
Ala Asp Ser Trp Tyr Leu Ala Leu Leu Gly Phe Ala Glu His Phe Arg
          85          90          95
Thr Ser Ser Pro Pro Lys Ile Arg Leu Cys Val His Cys Leu Gln Ala
          100          105          110
Val Phe Pro Phe Lys Pro Pro Gln Arg Ile Glu Ala Arg Thr His Leu
          115          120          125
Gln Leu Gly Ser Val Leu Tyr His His Thr Lys Asn Ser Glu Gln Ala

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130	135	140
Arg Ser His Leu Glu Lys Ala Trp Leu Ile Ser Gln Gln Ile Pro Gln		
145	150	155
Phe Glu Asp Val Lys Phe Glu Ala Ala Ser Leu Leu Ser Glu Leu Tyr		160
	165	170
Cys Gln Glu Asn Ser Val Asp Ala Ala Lys Pro Leu Leu Arg Lys Ala		175
	180	185
Ile Gln Ile Ser Gln Gln Thr Pro Tyr Trp His Cys Arg Leu Leu Phe		190
	195	200
Gln Leu Ala Gln Leu His Thr Leu Glu Lys Asp Leu Val Ser Ala Cys		205
	210	215
Asp Leu Leu Gly Val Gly Ala Glu Tyr Ala Arg Val Val Gly Ser Glu		220
225	230	235
Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met		240
	245	250
Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln		255
	260	265
Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg		270
	275	280
Val Phe Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln		285
	290	295
Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Gln Cys Ile Gln		300
305	310	315
Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala		320
	325	330
Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr		335
	340	345
Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala		350
	355	360
Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met		365
	370	375
Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu		380
385	390	395
His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu		400
	405	410
Gln Glu Ile Ser Gln Val Cys Gln Leu Cys Gln Gln Ser Pro Arg Leu		415
	420	425
Phe Ser Asn His Ala Ala Gln Leu His Thr Leu Leu Gly Leu Tyr Cys		430
	435	440
Val Ser Val Asn Cys Met Asp Asn Ala Glu Ala Gln Phe Thr Thr Ala		445
	450	455
Leu Arg Leu Thr Asn His Gln Glu Leu Trp Ala Phe Ile Val Thr Asn		460
465	470	475
Leu Ala Ser Val Tyr Ile Arg Glu Gly Asn Arg His Gln Glu Val Val		480
	485	490
Leu Tyr Ser Leu Leu Glu Arg Ile Asn Pro Asp His Ser Phe Pro Val		495
	500	505
Ser Ser His Cys Leu Arg Ala Ala Phe Tyr Val Arg Gly Leu Phe		510
	515	520
Ser Phe Phe Gln Gly Arg Tyr Asn Glu Ala Lys Arg Phe Leu Arg Glu		525
	530	535
Thr Leu Lys Met Ser Asn Ala Glu Asp Leu Asn Arg Leu Thr Ala Cys		540
545	550	555
Ser Leu Val Leu Leu Gly His Ile Phe Tyr Val Leu Gly Asn His Arg		560
	565	570
Glu Ser Asn Asn Met Val Val Pro Ala Met Gln Leu Ala Ser Lys Ile		575
	580	585
Pro Asp Met Ser Val Gln Leu Trp Ser Ser Ala Leu Leu Arg Asp Leu		590
	595	600
Asn Lys Ala Cys Gly Asn Ala Met Asp Ala His Glu Ala Ala Gln Met		605
	610	615
His Gln Asn Phe Ser Gln Gln Leu Leu Gln Asp His Ile Glu Ala Cys		620
625	630	635
Ser Leu Pro Glu His Asn Leu Ile Thr Trp Thr Asp Gly Pro Pro Pro		640

				645					650					655
Val	Gln	Phe	Gln	Ala	Gln	Asn	Gly	Pro	Asn	Thr	Ser	Leu	Ala	Ser
			660					665					670	
Leu														
673														

<210> 3493
 <211> 674
 <212> PRT
 <213> Homo sapiens

<400> 3493

Pro	Asn	Gly	Val	Ala	Leu	Leu	His	Leu	Pro	Gly	Ala	Ala	Val	Ile	Pro
1				5				10					15		
Asn	Thr	Asn	Tyr	Met	Phe	Gln	Asp	Ala	Leu	Gly	Gly	Arg	Ser	Arg	Gly
		20						25					30		
Ser	Arg	Glu	Ser	Pro	Ala	Pro	Ser	Arg	Ala	Pro	Ala	Ser	Ala	Ser	
		35					40					45			
Leu	Trp	Arg	Arg	Leu	Val	Val	Val	Glu	Ala	Lys	Met	Ala	Ala	His	Ala
	50					55					60				
Ala	Ala	Ala	Ala	Gln	Ala	Ala	Ala	Gln	Ala	Ala	His	Ala	Glu	Ala	
65				70				75					80		
Ala	Asp	Ser	Trp	Tyr	Leu	Ala	Leu	Gly	Phe	Ala	Glu	His	Phe	Arg	
			85					90					95		
Thr	Ser	Ser	Pro	Pro	Lys	Ile	Arg	Leu	Cys	Val	His	Cys	Leu	Gln	Ala
			100					105					110		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
	115						120					125			
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
	130					135					140				
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
145					150					155				160	
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
			165					170					175		
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			180					185					190		
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe
	195					200						205			
Gln	Leu	Ala	Gln	Leu	His	Thr	Leu	Glu	Lys	Asp	Leu	Val	Ser	Ala	Cys
	210					215					220				
Asp	Leu	Leu	Gly	Val	Gly	Ala	Glu	Tyr	Ala	Arg	Val	Val	Gly	Ser	Glu
225					230					235				240	
Tyr	Thr	Arg	Ala	Leu	Phe	Leu	Leu	Ser	Lys	Gly	Met	Leu	Leu	Leu	Met
			245					250					255		
Glu	Arg	Lys	Leu	Gln	Glu	Val	His	Pro	Leu	Leu	Thr	Leu	Cys	Gly	Gln
		260						265					270		
Ile	Val	Glu	Asn	Trp	Gln	Gly	Asn	Pro	Ile	Gln	Lys	Glu	Ser	Leu	Arg
	275					280						285			
Val	Phe	Phe	Leu	Val	Leu	Gln	Val	Thr	His	Tyr	Leu	Asp	Ala	Gly	Gln
	290					295					300				
Val	Lys	Ser	Val	Lys	Pro	Cys	Leu	Lys	Gln	Leu	Gln	Gln	Cys	Ile	Gln
305					310					315				320	
Thr	Ile	Ser	Thr	Leu	His	Asp	Asp	Glu	Ile	Leu	Pro	Ser	Asn	Pro	Ala
			325					330					335		
Asp	Leu	Phe	His	Trp	Leu	Pro	Lys	Glu	His	Met	Cys	Val	Leu	Val	Tyr
		340						345					350		
Leu	Val	Thr	Val	Met	His	Ser	Met	Gln	Ala	Gly	Tyr	Leu	Glu	Lys	Ala
	355					360					365				
Gln	Lys	Tyr	Thr	Asp	Lys	Ala	Leu	Met	Gln	Leu	Glu	Lys	Leu	Lys	Met
370					375					380					
Leu	Asp	Cys	Ser	Pro	Ile	Leu	Ser	Ser	Phe	Gln	Val	Ile	Leu	Leu	Glu

385 390 395 400
 His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu
 405 410 415
 Gln Glu Ile Ser Gln Val Cys Gln Leu Cys Gln Gln Ser Pro Arg Leu
 420 425 430
 Phe Ser Asn His Ala Ala Gln Leu His Thr Leu Leu Gly Leu Tyr Cys
 435 440 445
 Val Ser Val Asn Cys Met Asp Asn Ala Glu Ala Gln Phe Thr Thr Ala
 450 455 460
 Leu Arg Leu Thr Asn His Gln Glu Leu Trp Ala Phe Ile Val Thr Asn
 465 470 475 480
 Leu Ala Ser Val Tyr Ile Arg Glu Gly Asn Arg His Gln Glu Val Val
 485 490 495
 Leu Tyr Ser Leu Leu Glu Arg Ile Asn Pro Asp His Ser Phe Pro Val
 500 505 510
 Ser Ser His Cys Leu Arg Ala Ala Ala Phe Tyr Val Arg Gly Leu Phe
 515 520 525
 Ser Phe Phe Gln Gly Arg Tyr Asn Glu Ala Lys Arg Phe Leu Arg Glu
 530 535 540
 Thr Leu Lys Met Ser Asn Ala Glu Asp Leu Asn Arg Leu Thr Ala Cys
 545 550 555 560
 Ser Leu Val Leu Leu Gly His Ile Phe Tyr Val Leu Gly Asn His Arg
 565 570 575
 Glu Ser Asn Asn Met Val Val Pro Ala Met Gln Leu Ala Ser Lys Ile
 580 585 590
 Pro Asp Met Ser Val Gln Leu Trp Ser Ser Ala Leu Leu Arg Asp Leu
 595 600 605
 Asn Lys Ala Cys Gly Asn Ala Met Asp Ala His Glu Ala Ala Gln Met
 610 615 620
 His Gln Asn Phe Ser Gln Gln Leu Leu Gln Asp His Ile Glu Ala Cys
 625 630 635 640
 Ser Leu Pro Glu His Asn Leu Ile Thr Trp Thr Asp Gly Pro Pro Pro
 645 650 655
 Val Gln Phe Gln Ala Gln Asn Gly Pro Asn Thr Ser Leu Ala Ser Leu
 660 665 670
 Leu
 673

<210> 3494
 <211> 544
 <212> PRT
 <213> Homo sapiens

<400> 3494
 Val Leu Arg Gly Gln Arg Gly Pro Ala Gly Gly Leu Ala Glu Glu Arg
 1 5 10 15
 Arg Arg Gly Arg Asn Glu Trp Arg Ile His Asp Val Thr Thr Ala Pro
 20 25 30
 Phe Pro Gly Leu Val Gln Arg Arg Ser Arg Leu Leu Ile Val Ser Gln
 35 40 45
 Val Arg Tyr Phe Leu Lys Asn Lys Val Ser Pro Asp Leu Cys Asn Glu
 50 55 60
 Asp Gly Leu Thr Ala Leu His Gln Cys Cys Ile Asp Asn Phe Glu Glu
 65 70 75 80
 Ile Val Lys Leu Leu Leu Ser His Gly Ala Asn Val Asn Ala Lys Asp
 85 90 95
 Asn Glu Leu Trp Thr Pro Leu His Ala Ala Ala Thr Cys Gly His Ile
 100 105 110
 Asn Leu Val Lys Ile Leu Val Gln Tyr Gly Ala Asp Leu Leu Ala Val
 115 120 125
 Asn Ser Asp Gly Asn Met Pro Tyr Asp Leu Cys Glu Asp Glu Pro Thr

130	135	140
Leu Asp Val Ile Glu Thr Cys Met Ala Tyr Gln Gly Ile Thr Gln Glu		
145	150	155
Lys Ile Asn Glu Met Arg Val Ala Pro Glu Gln Gln Met Ile Ala Asp		160
	165	170
Ile His Cys Met Ile Ala Ala Gly Gln Asp Leu Asp Trp Ile Asp Ala		175
	180	185
Gln Gly Ala Thr Leu Leu His Ile Ala Gly Ala Asn Gly Tyr Leu Arg		190
	195	200
Ala Ala Glu Leu Leu Leu Asp His Gly Val Arg Val Asp Val Lys Asp		205
	210	215
Trp Asp Gly Trp Glu Pro Leu His Ala Ala Ala Phe Trp Gly Gln Met		220
225	230	235
Gln Met Ala Glu Leu Val Ser His Gly Ala Asn Leu Asn Ala Arg		240
	245	250
Thr Ser Met Asp Glu Met Pro Ile Asp Leu Cys Glu Glu Glu Glu Phe		255
	260	265
Lys Val Leu Leu Leu Glu Leu Lys His Lys His Asp Val Ile Met Lys		270
	275	280
Ser Gln Leu Arg His Lys Ser Ser Leu Ser Arg Arg Thr Ser His Arg		285
	290	295
Gln Ala Ser Ser Val Gly Lys Val Val Arg Arg Thr Gln Pro Val Gly		300
305	310	315
Thr Gly Pro Asn Leu Tyr Arg Lys Glu Tyr Glu Gly Glu Glu Ala Ile		320
	325	330
Leu Trp Gln Arg Ser Ala Ala Glu Asp Gln Arg Thr Ser Thr Tyr Asn		335
	340	345
Gly Asp Ile Arg Glu Thr Arg Thr Asp Gln Glu Asn Lys Asp Pro Asn		350
	355	360
Pro Arg Leu Glu Lys Pro Val Leu Leu Ser Glu Phe Pro Thr Lys Ile		365
	370	375
Pro Arg Gly Glu Leu Asp Met Pro Val Glu Asn Gly Leu Arg Ala Pro		380
385	390	395
Val Ser Ala Tyr Gln Tyr Ala Leu Ala Asn Gly Asp Val Trp Lys Val		400
	405	410
His Glu Val Pro Asp Tyr Ser Met Ala Tyr Gly Asn Pro Gly Val Ala		415
	420	425
Asp Ala Thr Pro Pro Trp Ser Ser Tyr Lys Glu Gln Ser Pro Gln Thr		430
	435	440
Leu Leu Glu Leu Lys Arg Gln Arg Ala Ala Ala Lys Leu Leu Ser His		445
	450	455
Pro Phe Leu Ser Thr His Leu Gly Ser Ser Met Ala Arg Thr Gly Glu		460
465	470	475
Ser Ser Ser Glu Gly Lys Ala Pro Leu Ile Gly Gly Arg Thr Ser Pro		480
	485	490
Tyr Ser Ser Asn Gly Thr Ser Val Tyr Tyr Thr Val Thr Ser Gly Asp		495
	500	505
Pro Pro Leu Leu Lys Phe Lys Ala Pro Ile Glu Glu Met Glu Glu Lys		510
	515	520
Val His Gly Cys Cys Arg Ile Ser		525
530	535	536

<210> 3495

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3495

Ala Pro Met Ala Asp Thr Thr Pro Asn Gly Pro Gln Gly Ala Gly Ala
1 5 10 15
Val Gln Phe Met Met Thr Asn Lys Leu Asp Thr Ala Met Trp Leu Ser

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<210> 3496
<211> 956
<212> PRT
<213> Homo sapiens
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5223

5224

705					710					715				720
Cys	Pro	Phe	Ser	His	His	Val	Ser	Lys	Glu	Lys	Met	Pro	Val	Cys
				725					730					735
Tyr	Phe	Leu	Lys	Gly	Ile	Cys	Ser	Asn	Ser	Asn	Cys	Pro	Tyr	Ser
			740					745					750	
Val	Tyr	Val	Ser	Arg	Lys	Ala	Glu	Val	Cys	Ser	Asp	Phe	Leu	Lys
		755					760				765			
Tyr	Cys	Pro	Leu	Gly	Ala	Lys	Cys	Lys	Lys	Lys	His	Thr	Leu	Leu
	770					775					780			
Pro	Asp	Phe	Ala	Arg	Arg	Gly	Ala	Cys	Pro	Arg	Gly	Ala	Gln	Cys
	785				790					795				800
Leu	Leu	His	Arg	Thr	Gln	Lys	Arg	His	Ser	Arg	Arg	Ala	Ala	Thr
			805					810						815
Pro	Ala	Pro	Gly	Pro	Ser	Asp	Ala	Thr	Ala	Arg	Ser	Arg	Val	Ser
			820					825					830	
Ser	His	Gly	Pro	Arg	Lys	Pro	Ser	Ala	Ser	Gln	Arg	Pro	Thr	Arg
	835						840					845		
Thr	Pro	Ser	Ser	Ala	Ala	Leu	Thr	Ala	Ala	Ala	Val	Ala	Ala	Pro
	850					855					860			
His	Cys	Pro	Gly	Gly	Ser	Ala	Ser	Pro	Ser	Ser	Ser	Lys	Ala	Ser
	865				870					875				880
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Pro	Pro	Ala	Ser	Leu	Asp	His	Glu
				885					890					895
Pro	Ser	Leu	Gln	Glu	Ala	Ala	Leu	Ala	Ala	Ala	Cys	Ser	Asn	Arg
			900					905						910
Cys	Lys	Leu	Pro	Ser	Phe	Ile	Ser	Leu	Gln	Ser	Ser	Pro	Ser	Pro
		915					920					925		
Ala	Gln	Pro	Arg	Val	Arg	Ala	Pro	Arg	Ala	Pro	Leu	Thr	Lys	Asp
	930					935					940			
Gly	Lys	Pro	Leu	His	Ile	Lys	Pro	Arg	Leu					
	945				950				954					

<210> 3497

<211> 487

<212> PRT

<213> Homo sapiens

<400> 3497

Ala	Thr	Ala	Arg	Asp	Leu	Gly	Cys	Ala	Arg	Arg	Ile	Asp	Arg	Val	Val
1				5					10					15	
Met	Glu	Ser	Thr	Pro	Ser	Arg	Gly	Leu	Asn	Arg	Val	His	Leu	Gln	Cys
			20					25					30		
Arg	Asn	Leu	Gln	Glu	Phe	Leu	Gly	Gly	Leu	Ser	Pro	Gly	Val	Leu	Asp
		35					40					45			
Arg	Leu	Tyr	Gly	His	Pro	Ala	Thr	Cys	Leu	Ala	Val	Phe	Arg	Glu	Leu
	50					55					60				
Pro	Ser	Leu	Ala	Lys	Asn	Trp	Val	Met	Arg	Met	Leu	Phe	Leu	Glu	Gln
	65				70					75				80	
Pro	Leu	Pro	Gln	Ala	Ala	Val	Ala	Leu	Trp	Val	Lys	Lys	Glu	Phe	Ser
			85					90					95		
Lys	Ala	Gln	Glu	Glu	Ser	Thr	Gly	Leu	Leu	Ser	Gly	Leu	Arg	Ile	Trp
			100					105					110		
His	Thr	Gln	Leu	Leu	Pro	Gly	Gly	Leu	Gln	Gly	Leu	Ile	Leu	Asn	Pro
		115					120					125			
Ile	Phe	Arg	Gln	Asn	Leu	Arg	Ile	Ala	Leu	Leu	Gly	Gly	Gly	Lys	Ala
	130					135					140				
Trp	Ser	Asp	Asp	Thr	Ser	Gln	Leu	Gly	Pro	Asp	Lys	His	Ala	Arg	Asp
	145				150					155				160	
Val	Pro	Ser	Leu	Asp	Lys	Tyr	Ala	Glu	Glu	Arg	Trp	Glu	Val	Val	Leu
			165					170					175		
His	Phe	Met	Val	Gly	Ser	Pro	Ser	Ala	Ala	Val	Ser	Gln	Asp	Leu	Ala

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      180      185      190
Gln Leu Leu Ser Gln Ala Gly Leu Met Lys Ser Thr Glu Pro Gly Glu
      195      200      205
Pro Pro Cys Ile Thr Ser Ala Gly Phe Gln Phe Leu Leu Asp Thr
      210      215      220
Pro Ala Gln Leu Trp Tyr Phe Met Leu Gln Tyr Leu Gln Thr Ala Gln
225      230      235      240
Ser Arg Gly Met Asp Leu Val Glu Ile Leu Ser Phe Leu Phe Gln Leu
      245      250      255
Ser Phe Ser Thr Leu Gly Lys Asp Tyr Ser Val Glu Gly Met Ser Asp
      260      265      270
Ser Leu Leu Asn Phe Leu Gln His Leu Arg Glu Phe Gly Leu Val Phe
      275      280      285
Gln Arg Lys Arg Lys Ser Arg Arg Tyr Tyr Pro Thr Arg Ala Leu Ala
290      295      300
Ile Asn Leu Ser Ser Gly Val Ser Gly Ala Gly Gly Thr Val His Gln
305      310      315      320
Pro Gly Phe Ile Val Val Glu Thr Asn Tyr Arg Leu Tyr Ala Tyr Thr
      325      330      335
Glu Ser Glu Leu Gln Ile Ala Leu Ile Ala Leu Phe Ser Glu Met Leu
      340      345      350
Tyr Pro Phe Pro Asn Met Val Val Ala Arg Val Thr Arg Glu Ser Val
      355      360      365
Gln Gln Ala Ile Ala Ser Gly Ile Thr Ala Gln Gln Ile Ile His Phe
370      375      380
Leu Arg Thr Arg Ala His Pro Val Met Leu Lys Gln Thr Pro Val Leu
385      390      395      400
Pro Pro Thr Ile Thr Asp Gln Ile Arg Leu Trp Glu Leu Glu Arg Asp
      405      410      415
Arg Leu Arg Phe Thr Glu Gly Val Leu Tyr Asn Gln Phe Leu Ser Gln
      420      425      430
Val Asp Phe Glu Leu Leu Leu Ala His Ala Pro Lys Leu Gly Val Leu
      435      440      445
Val Phe Glu Asn Thr Pro Ala Lys Arg Leu Met Val Val Thr Pro Ala
450      455      460
Gly His Ser Asp Val Lys Arg Phe Trp Lys Arg Gln Lys His Ser Ser
465      470      475      480

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<210> 3498

<211> 203

<212> PRT

<213> Homo sapiens

<400> 3498

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Arg Asp Leu Gly Pro Ala Ala Leu Met Thr Ala Ser Ala Ser Ser Phe
  1      5      10      15
Ser Ser Ser Gln Gly Val Gln Gln Pro Ser Ile Tyr Ser Phe Ser Gln
      20      25      30
Ile Thr Arg Ser Leu Phe Leu Ser Asn Gly Val Ala Ala Asn Asp Lys
      35      40      45
Leu Leu Leu Ser Ser Asn Arg Ile Thr Ala Ile Val Asn Ala Ser Val
      50      55      60
Gly Ser Gly Gln Arg Ile Leu Arg Gly Leu Gln Tyr Ile Lys Val Pro
      65      70      75      80
Val Thr Asp Ala Arg Asp Ser Arg Leu Tyr Asp Phe Phe Asp Pro Ile
      85      90      95
Ala Asp Leu Ile His Thr Val Ser Met Arg Gln Gly Arg Thr Leu Leu
      100      105      110
Asn Cys Met Ala Gly Met Ser Arg Ser Ala Ser Leu Cys Leu Ala Tyr

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115	120	125
Leu Met Lys Tyr His Ser Met Ser Leu Leu Asp Ala His Thr Trp Ala		
130	135	140
Thr Lys Ser Arg Arg Pro Ile Ile Arg Pro Asn Asn Gly Phe Trp Glu		
145	150	155
Gln Leu Ile Asn Tyr Glu Phe Lys Leu Phe Asn Asn Asn Thr Val Arg		
165	170	175
Met Ile Asn Ser Pro Val Gly Asn Ile Pro Asp Ile Tyr Glu Lys Asp		
180	185	190
Leu Arg Met Met Ile Ser Met		
195	199	

<210> 3499
 <211> 519
 <212> PRT
 <213> Homo sapiens

<400> 3499

Thr Ala Gly Phe Leu Leu Ala Pro Leu Glu Met Gln Arg Leu Leu Thr		
1	5	10
Pro Val Lys Arg Ile Leu Gln Leu Thr Arg Ala Val Gln Glu Thr Ser		
20	25	30
Leu Thr Pro Ala Arg Leu Leu Pro Val Ala His Gln Arg Phe Ser Thr		
35	40	45
Ala Ser Ala Val Pro Leu Ala Lys Thr Asp Thr Trp Pro Lys Asp Val		
50	55	60
Gly Ile Leu Ala Leu Glu Val Tyr Phe Pro Ala Gln Tyr Val Asp Gln		
65	70	75
Thr Asp Leu Glu Lys Tyr Asn Asn Val Glu Ala Gly Lys Tyr Thr Val		
85	90	95
Gly Leu Gly Gln Thr Arg Met Gly Phe Cys Ser Val Gln Glu Asp Ile		
100	105	110
Asn Ser Leu Cys Leu Thr Val Val Gln Arg Leu Met Glu Arg Ile Gln		
115	120	125
Leu Pro Trp Asp Ser Val Gly Arg Leu Glu Val Gly Thr Glu Thr Ile		
130	135	140
Ile Asp Lys Ser Lys Ala Val Lys Thr Val Leu Met Glu Leu Phe Gln		
145	150	155
Asp Ser Gly Asn Thr Asp Ile Glu Gly Ile Asp Thr Thr Asn Ala Cys		
165	170	175
Tyr Gly Gly Thr Ala Ser Leu Phe Asn Ala Ala Asn Trp Met Glu Ser		
180	185	190
Ser Ser Trp Asp Gly Arg Tyr Ala Met Val Val Cys Gly Asp Ile Ala		
195	200	205
Val Tyr Pro Ser Gly Asn Ala Arg Pro Thr Gly Gly Ala Gly Ala Val		
210	215	220
Ala Met Leu Ile Gly Pro Lys Ala Pro Leu Ala Leu Glu Arg Gly Leu		
225	230	235
Arg Gly Thr His Met Glu Asn Val Tyr Asp Phe Tyr Lys Pro Asn Leu		
245	250	255
Ala Ser Glu Tyr Pro Ile Val Asp Gly Lys Leu Ser Ile Gln Cys Tyr		
260	265	270
Leu Arg Ala Leu Asp Arg Cys Tyr Thr Ser Tyr Arg Lys Lys Ile Gln		
275	280	285
Asn Gln Trp Lys Gln Ala Gly Ser Asp Arg Pro Phe Thr Leu Asp Asp		
290	295	300
Leu Gln Tyr Met Ile Phe His Thr Pro Phe Cys Lys Met Val Gln Lys		
305	310	315
Ser Leu Ala Arg Leu Met Phe Asn Asp Phe Leu Ser Ala Ser Ser Asp		
325	330	335
Thr Gln Thr Ser Leu Tyr Lys Gly Leu Glu Ala Phe Gly Gly Leu Lys		

340	345	350
Leu Glu Asp Thr Tyr Thr Asn Lys Asp Leu Asp Lys Ala Leu Leu Lys		
355	360	365
Ala Ser Gln Asp Met Phe Asp Lys Lys Thr Lys Ala Ser Leu Tyr Leu		
370	375	380
Ser Thr His Asn Gly Asn Met Tyr Thr Ser Ser Leu Tyr Gly Cys Leu		
385	390	395
Ala Ser Leu Leu Ser His His Ser Ala Gln Glu Leu Ala Gly Ser Arg		
405	410	415
Ile Gly Ala Phe Ser Tyr Gly Ser Gly Leu Ala Ala Ser Phe Phe Ser		
420	425	430
Phe Arg Val Ser Gln Asp Ala Ala Pro Gly Ser Pro Leu Asp Lys Leu		
435	440	445
Val Ser Ser Thr Ser Asp Leu Pro Lys Arg Leu Ala Ser Arg Lys Cys		
450	455	460
Val Ser Pro Glu Glu Phe Thr Glu Ile Met Asn Gln Arg Glu Gln Phe		
465	470	475
Tyr His Lys Val Asn Phe Ser Pro Pro Gly Asp Thr Asn Ser Leu Phe		
485	490	495
Pro Gly Thr Trp Tyr Leu Glu Arg Val Asp Glu Gln His Arg Arg Lys		
500	505	510
Tyr Ala Arg Arg Pro Val		
515	518	

<210> 3500
 <211> 836
 <212> PRT
 <213> Homo sapiens

<400> 3500
Met Leu Pro Thr Glu Val Pro Gln Ser His Pro Gly Pro Ser Ala Leu
1 5 10 15
Leu Leu Leu Gln Leu Leu Leu Pro Pro Thr Ser Ala Phe Phe Pro Asn
20 25 30
Ile Trp Ser Leu Leu Ala Ala Pro Gly Ser Ile Thr His Gln Asp Leu
35 40 45
Thr Glu Glu Ala Ala Leu Asn Val Thr Leu Gln Leu Phe Leu Glu Gln
50 55 60
Pro Pro Pro Gly Arg Pro Pro Leu Arg Leu Glu Asp Phe Leu Gly Arg
65 70 75 80
Thr Leu Leu Ala Asp Asp Leu Phe Ala Ala Tyr Phe Gly Pro Gly Ser
85 90 95
Ser Arg Arg Phe Arg Ala Ala Leu Gly Glu Val Ser Arg Ala Asn Ala
100 105 110
Ala Gln Asp Phe Leu Pro Thr Ser Arg Asn Asp Pro Asp Leu His Phe
115 120 125
Asp Ala Glu Arg Leu Gly Gln Gly Arg Ala Arg Leu Val Gly Ala Leu
130 135 140
Arg Glu Thr Val Val Ala Ala Arg Ala Leu Asp His Thr Leu Ala Arg
145 150 155 160
Gln Arg Leu Gly Ala Ala Leu His Ala Leu Gln Asp Phe Tyr Ser His
165 170 175
Ser Asn Trp Val Glu Leu Gly Glu Gln Gln Pro His Pro His Leu Leu
180 185 190
Trp Pro Arg Gln Glu Leu Gln Asn Leu Ala Gln Val Ala Asp Pro Thr
195 200 205
Cys Ser Asp Cys Glu Glu Leu Ser Cys Pro Arg Asn Trp Leu Gly Phe
210 215 220
Thr Leu Leu Thr Ser Gly Tyr Phe Gly Thr His Pro Pro Lys Pro Pro
225 230 235 240
Gly Lys Cys Ser His Gly Gly His Phe Asp Arg Ser Ser Ser Gln Pro

					245					250					255
Pro	Arg	Gly	Gly	Ile	Asn	Lys	Asp	Ser	Thr	Ser	Pro	Gly	Phe	Ser	Pro
			260					265					270		
His	His	Met	Leu	His	Leu	Gln	Ala	Ala	Lys	Leu	Ala	Leu	Leu	Ala	Ser
		275					280					285			
Ile	Gln	Ala	Phe	Ser	Leu	Leu	Arg	Ser	Arg	Leu	Gly	Asp	Arg	Asp	Phe
		290					295				300				
Ser	Arg	Leu	Leu	Asp	Ile	Thr	Pro	Ala	Ser	Ser	Leu	Ser	Phe	Val	Leu
305					310						315				320
Asp	Thr	Thr	Gly	Ser	Met	Gly	Glu	Glu	Ile	Asn	Ala	Ala	Lys	Ile	Gln
				325						330				335	
Ala	Arg	His	Leu	Val	Glu	Gln	Arg	Arg	Gly	Ser	Pro	Met	Glu	Pro	Val
			340					345					350		
His	Tyr	Val	Leu	Val	Pro	Phe	His	Asp	Pro	Gly	Phe	Gly	Pro	Val	Phe
		355					360					365			
Thr	Thr	Ser	Asp	Pro	Asp	Ser	Phe	Trp	Gln	Gln	Leu	Asn	Glu	Ile	His
		370				375					380				
Ala	Leu	Gly	Gly	Gly	Asp	Glu	Pro	Glu	Met	Cys	Leu	Ser	Ala	Leu	Gln
385					390					395					400
Leu	Ala	Leu	Leu	His	Thr	Pro	Pro	Leu	Ser	Asp	Ile	Phe	Val	Phe	Thr
				405					410					415	
Asp	Ala	Ser	Pro	Lys	Asp	Ala	Phe	Leu	Thr	Asn	Gln	Val	Glu	Ser	Leu
			420					425					430		
Thr	Gln	Glu	Arg	Arg	Cys	Arg	Val	Thr	Phe	Leu	Val	Thr	Glu	Asp	Thr
			435				440					445			
Ser	Arg	Val	Gln	Gly	Arg	Ala	Arg	Arg	Glu	Ile	Leu	Ser	Pro	Leu	Arg
		450				455				460					
Phe	Glu	Pro	Tyr	Lys	Ala	Val	Ala	Leu	Ala	Ser	Gly	Gly	Glu	Val	Ile
465					470					475					480
Phe	Thr	Lys	Asp	Gln	His	Ile	Arg	Asp	Val	Ala	Ala	Ile	Val	Gly	Glu
				485					490					495	
Ser	Met	Ala	Ala	Leu	Val	Thr	Leu	Pro	Leu	Asp	Pro	Pro	Val	Val	Val
			500					505					510		
Pro	Gly	Gln	Pro	Leu	Val	Phe	Ser	Val	Asp	Gly	Leu	Leu	Gln	Lys	Ile
			515					520				525			
Thr	Val	Arg	Ile	His	Gly	Asp	Ile	Ser	Ser	Phe	Trp	Ile	Lys	Asn	Pro
					535						540				
Ala	Gly	Val	Ser	Gln	Gly	Gln	Glu	Glu	Gly	Gly	Gly	Pro	Leu	Gly	His
545					550					555					560
Thr	Arg	Arg	Phe	Gly	Gln	Phe	Trp	Met	Val	Thr	Met	Asp	Asp	Pro	Pro
				565					570				575		
Gln	Thr	Gly	Thr	Trp	Glu	Ile	Gln	Val	Thr	Ala	Glu	Asp	Thr	Pro	Gly
			580					585					590		
Val	Arg	Val	Gln	Ala	Gln	Thr	Ser	Leu	Asp	Phe	Leu	Phe	His	Phe	Gly
			595				600				605				
Ile	Pro	Met	Glu	Asp	Gly	Pro	His	Pro	Gly	Leu	Tyr	Pro	Leu	Thr	Gln
					615					620					
Pro	Val	Ala	Gly	Leu	Gln	Thr	Gln	Leu	Leu	Val	Glu	Val	Thr	Gly	Leu
625					630					635					640
Gly	Ser	Arg	Ala	Asn	Pro	Gly	Asp	Pro	Gln	Pro	His	Phe	Ser	His	Val
				645					650					655	
Ile	Leu	Arg	Gly	Val	Pro	Glu	Gly	Ala	Glu	Leu	Gly	Gln	Val	Pro	Leu
			660					665					670		
Glu	Pro	Val	Gly	Pro	Pro	Glu	Arg	Gly	Leu	Leu	Ala	Ala	Ser	Leu	Ser
			675				680					685			
Pro	Thr	Leu	Leu	Ser	Thr	Pro	Arg	Pro	Phe	Ser	Leu	Glu	Leu	Ile	Gly
					695						700				
Gln	Asp	Ala	Ala	Gly	Arg	Arg	Leu	His	Arg	Ala	Ala	Pro	Gln	Pro	Ser
705					710					715					720
Thr	Val	Val	Pro	Val	Leu	Leu	Glu	Leu	Ser	Gly	Pro	Ser	Gly	Phe	Leu
				725						730				735	
Ala	Pro	Gly	Ser	Lys	Val	Pro	Leu	Ser	Leu	Arg	Ile	Ala	Ser	Phe	Ser
			740					745					750		
Gly	Pro	Gln	Asp	Leu	Asp	Leu	Arg	Thr	Phe	Val	Asn	Pro	Ser	Phe	Ser

755	760	765
Leu Thr Ser Asn Leu Ser Arg Ala His Leu Glu Leu Asn Glu Ser Ala		
770	775	780
Trp Gly Arg Leu Trp Leu Glu Val Pro Asp Ser Ala Ala Pro Asp Ser		
785	790	795
Val Val Met Val Thr Val Thr Ala Gly Gly Arg Glu Ala Asn Pro Val		800
805	810	815
Pro Pro Thr His Ala Phe Leu Arg Leu Leu Val Ser Ala Pro Ala Pro		
820	825	830
Gln Asp Arg His		
835 836		

<210> 3501
 <211> 1526
 <212> PRT
 <213> Homo sapiens

<400> 3501

Arg Arg Ala His Pro Ser His Ser Arg Leu Ser Pro Tyr Leu Ser Val	
1 5 10 15	
Ser Arg Asp Pro Tyr Phe Phe Val Thr Val Ser Arg Thr Ile Leu Thr	
20 25 30	
Leu Ser Ala Pro Ala Pro Pro Arg Thr Pro Ala Pro Ser Met Gly	
35 40 45	
Thr Ala Leu Leu Gln Arg Gly Gly Cys Phe Leu Leu Cys Leu Ser Leu	
50 55 60	
Leu Leu Leu Gly Cys Trp Ala Glu Leu Gly Ser Gly Leu Glu Phe Pro	
65 70 75 80	
Gly Ala Glu Gly Gln Trp Thr Arg Phe Pro Lys Trp Asn Ala Cys Cys	
85 90 95	
Glu Ser Glu Met Ser Phe Gln Leu Lys Thr Arg Ser Ala Arg Gly Leu	
100 105 110	
Val Leu Tyr Phe Asp Asp Glu Gly Phe Cys Asp Phe Leu Glu Leu Ile	
115 120 125	
Leu Thr Arg Gly Gly Arg Leu Gln Leu Ser Phe Ser Ile Phe Cys Ala	
130 135 140	
Glu Pro Ala Thr Leu Leu Ala Asp Thr Pro Val Asn Asp Gly Ala Trp	
145 150 155 160	
His Ser Val Arg Ile Arg Arg Gln Phe Arg Asn Thr Thr Leu Phe Ile	
165 170 175	
Asp Gln Val Glu Ala Lys Trp Val Glu Val Lys Ser Lys Arg Arg Asp	
180 185 190	
Met Thr Val Phe Ser Gly Leu Phe Val Gly Gly Leu Pro Pro Glu Leu	
195 200 205	
Arg Ala Ala Ala Leu Lys Leu Thr Leu Ala Ser Val Arg Glu Arg Glu	
210 215 220	
Pro Phe Lys Gly Trp Ile Arg Asp Val Arg Val Asn Ser Ser Gln Val	
225 230 235 240	
Leu Pro Val Asp Ser Gly Glu Val Lys Leu Asp Asp Glu Pro Pro Asn	
245 250 255	
Ser Gly Gly Gly Ser Pro Cys Glu Ala Gly Glu Glu Gly Glu Gly Gly	
260 265 270	
Val Cys Leu Asn Gly Gly Val Cys Ser Val Val Asp Asp Gln Ala Val	
275 280 285	
Cys Asp Cys Ser Arg Thr Gly Phe Arg Gly Lys Asp Cys Ser Gln Glu	
290 295 300	
Asp Asn Asn Val Glu Gly Leu Ala His Leu Met Met Gly Asp Gln Gly	
305 310 315 320	
Lys Glu Glu Tyr Ile Ala Thr Phe Lys Gly Ser Glu Tyr Phe Cys Tyr	
325 330 335	
Asp Leu Ser Gln Asn Pro Ile Gln Ser Ser Ser Asp Glu Ile Thr Leu	

[illegible]

850	855	860
Leu Thr Val Asp Asp Gln Gln Ala Met Thr Gly Gln Met Ala Gly Asp		
865	870	875
His Thr Arg Leu Glu Phe His Asn Ile Glu Thr Gly Ile Ile Thr Glu		880
	885	890
Arg Arg Tyr Leu Ser Ser Val Pro Ser Asn Phe Ile Gly His Leu Gln		895
	900	905
Ser Leu Thr Phe Asn Gly Met Ala Tyr Ile Asp Leu Cys Lys Asn Gly		910
	915	920
Asp Ile Asp Tyr Cys Glu Leu Asn Ala Arg Phe Gly Phe Arg Asn Ile		925
	930	935
Ile Ala Asp Pro Val Thr Phe Lys Thr Lys Ser Ser Tyr Val Ala Leu		940
945	950	955
Ala Thr Leu Gln Ala Tyr Thr Ser Met His Leu Phe Phe Gln Phe Lys		960
	965	970
Thr Thr Ser Leu Asp Gly Leu Ile Leu Tyr Asn Ser Gly Asp Gly Asn		975
	980	985
Asp Phe Ile Val Val Glu Leu Val Lys Gly Tyr Leu His Tyr Val Phe		990
	995	1000
Asp Leu Gly Asn Gly Ala Asn Leu Ile Lys Gly Ser Ser Asn Lys Pro		1005
1010	1015	1020
Leu Asn Asp Asn Gln Trp His Asn Val Met Ile Ser Arg Asp Thr Ser		
1025	1030	1035
Asn Leu His Thr Val Lys Ile Asp Thr Lys Ile Thr Thr Gln Ile Thr		1040
	1045	1050
Ala Gly Ala Arg Asn Leu Asp Leu Lys Ser Asp Leu Tyr Ile Gly Gly		1055
	1060	1065
Val Ala Lys Glu Thr Tyr Lys Ser Leu Pro Lys Leu Val His Ala Lys		1070
	1075	1080
Glu Gly Phe Gln Gly Cys Leu Ala Ser Val Asp Leu Asn Gly Arg Leu		1085
	1090	1095
Pro Asp Leu Ile Ser Asp Gly Ser Phe Ser Cys Asn Gly Thr Asp Ser		1100
1105	1110	1115
Arg Arg Gly Met Trp Lys Gly Pro Ser Thr Thr Cys Gln Glu Asp Ser		1120
	1125	1130
Cys Ser Asn Gln Gly Val Cys Leu Gln Gln Trp Asp Gly Phe Ser Cys		1135
	1140	1145
Asp Cys Ser Met Thr Ser Phe Ser Gly Pro Leu Cys Asn Asp Pro Gly		1150
	1155	1160
Thr Thr Tyr Ile Phe Ser Lys Gly Gly Gly Gln Ile Thr Tyr Lys Trp		1165
	1170	1175
Pro Pro Asn Asp Arg Pro Ser Thr Arg Ala Asp Arg Leu Ala Ile Gly		1180
1185	1190	1195
Phe Ser Thr Val Gln Lys Glu Ala Val Leu Val Arg Val Asp Ser Ser		1200
	1205	1210
Ser Gly Leu Gly Asp Tyr Leu Glu Leu His Ile His Gln Gly Lys Ile		1215
	1220	1225
Gly Val Lys Phe Asn Val Gly Thr Asp Asp Ile Ala Ile Glu Glu Ser		1230
	1235	1240
Asn Ala Ile Ile Asn Asp Gly Lys Tyr His Val Val Arg Phe Thr Arg		1245
	1250	1255
Ser Gly Gly Asn Ala Thr Leu Gln Val Asp Ser Trp Pro Val Ile Glu		1260
1265	1270	1275
Arg Tyr Pro Ala Gly Arg Gln Leu Thr Ile Phe Asn Ser Gln Ala Thr		1280
	1285	1290
Ile Ile Ile Gly Lys Glu Gln Gly Gln Pro Phe Gln Gly Gln Leu		1295
	1300	1305
Ser Gly Leu Tyr Tyr Asn Gly Leu Lys Val Leu Asn Met Ala Ala Glu		1310
	1315	1320
Asn Asp Ala Asn Ile Ala Ile Val Gly Asn Val Arg Leu Val Gly Glu		1325
	1330	1335
Val Pro Ser Ser Met Thr Thr Glu Ser Thr Ala Thr Ala Met Gln Ser		1340
1345	1350	1355
Glu Met Ser Thr Ser Ile Met Glu Thr Thr Thr Thr Leu Ala Thr Ser		1360

1365 1370 1375
 Thr Ala Arg Arg Gly Lys Pro Pro Thr Lys Glu Pro Ile Ser Gln Thr
 1380 1385 1390
 Thr Asp Asp Ile Leu Val Ala Ser Ala Glu Cys Pro Ser Asp Asp Glu
 1395 1400 1405
 Asp Ile Asp Pro Cys Glu Pro Ser Ser Gly Gly Leu Ala Asn Pro Thr
 1410 1415 1420
 Arg Ala Gly Gly Arg Glu Pro Tyr Pro Gly Ser Ala Glu Val Ile Arg
 1425 1430 1435 1440
 Glu Ser Ser Ser Thr Thr Gly Met Val Val Gly Ile Val Ala Ala Ala
 1445 1450 1455
 Ala Leu Cys Ile Leu Ile Leu Tyr Ala Met Tyr Lys Tyr Arg Asn
 1460 1465 1470
 Arg Asp Glu Gly Ser Tyr His Val Asp Glu Ser Arg Asn Tyr Ile Ser
 1475 1480 1485
 Asn Ser Ala Gln Ser Asn Gly Ala Val Val Lys Glu Lys Gln Pro Ser
 1490 1495 1500
 Ser Ala Lys Ser Ser Asn Lys Asn Lys Lys Asn Lys Asp Lys Glu Tyr
 1505 1510 1515 1520
 Tyr Val
 1522

<210> 3502
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 3502
 Lys Pro Ala His Leu Pro Phe Thr Val Ile Ile Met Pro Lys Arg Lys
 1 5 10 15
 Pro Ser Glu Gly Ala Met Ser Asp Lys Val Lys Ala Lys Phe Glu Leu
 20 25 30
 Gln Arg Arg Ser Ala Gly Leu Phe Ser Lys Pro Thr Pro Pro Lys Pro
 35 40 45
 Glu Thr Arg Pro Lys Lys Asp Pro Ala Asn Gln Arg Gln Lys Leu Pro
 50 55 60
 Lys Val Arg Lys Gly Lys Ala Asp Ala Ser Lys Glu Gly Asn Ser Pro
 65 70 75 80
 Ala Glu Glu Arg Cys Ser Met Val Gln Thr Gln Lys Val Glu Gly Trp
 85 90 95
 Arg Ser Gly Ser Glu Leu Pro Val Ala Leu Ser Phe
 100 105 108

<210> 3503
 <211> 1105
 <212> PRT
 <213> Homo sapiens

<400> 3503
 Ser Gly Gly Arg Gly Pro Val Arg Val Arg Ser Glu Gln Leu Ser Pro
 1 5 10 15
 Ser Ala Glu Gln Val Ser Gln Ile Ser Gln Ile Ser Leu Gly Arg Arg
 20 25 30
 Pro Leu Ser Ser Leu Pro Pro Pro Pro Ser Arg Ala Leu Ala Pro Thr
 35 40 45
 Arg Ala Pro Asp Thr Ala Leu Thr Ile Met Glu Val Ala Glu Val Glu
 50 55 60
 Ser Pro Leu Asn Pro Ser Cys Lys Ile Met Thr Phe Arg Pro Ser Met

65					70					75				80
Glu	Glu	Phe	Arg	Glu	Phe	Asn	Lys	Tyr	Leu	Ala	Tyr	Met	Glu	Ser Lys
				85					90					95
Gly	Ala	His	Arg	Ala	Gly	Leu	Ala	Lys	Val	Ile	Pro	Pro	Lys	Glu Trp
			100					105					110	
Lys	Pro	Arg	Gln	Cys	Tyr	Asp	Asp	Ile	Asp	Asn	Leu	Leu	Ile	Pro Ala
		115				120					125			
Pro	Ile	Gln	Gln	Met	Val	Thr	Gly	Gln	Ser	Gly	Leu	Phe	Thr	Gln Tyr
	130					135					140			
Asn	Ile	Gln	Lys	Lys	Ala	Met	Thr	Val	Lys	Glu	Phe	Arg	Gln	Leu Ala
145				150						155				160
Asn	Ser	Gly	Lys	Tyr	Cys	Thr	Pro	Arg	Tyr	Leu	Asp	Tyr	Glu	Asp Leu
			165					170					175	
Glu	Arg	Lys	Tyr	Trp	Lys	Asn	Leu	Thr	Phe	Val	Ala	Pro	Ile	Tyr Gly
		180					185						190	
Ala	Asp	Ile	Asn	Gly	Ser	Ile	Tyr	Asp	Glu	Gly	Val	Asp	Glu	Trp Asn
	195					200					205			
Ile	Ala	Arg	Leu	Asn	Thr	Val	Leu	Asp	Val	Val	Glu	Glu	Glu	Cys Gly
210				215							220			
Ile	Ser	Ile	Glu	Gly	Val	Asn	Thr	Pro	Tyr	Leu	Tyr	Phe	Gly	Met Trp
225				230						235				240
Lys	Thr	Thr	Phe	Ala	Trp	His	Thr	Glu	Asp	Met	Asp	Leu	Tyr	Ser Ile
			245					250					255	
Asn	Tyr	Leu	His	Phe	Gly	Glu	Pro	Lys	Ser	Trp	Tyr	Ala	Ile	Pro Pro
		260					265					270		
Glu	His	Gly	Lys	Arg	Leu	Glu	Arg	Leu	Ala	Gln	Gly	Phe	Phe	Pro Ser
	275					280					285			
Ser	Ser	Gln	Gly	Cys	Asp	Ala	Phe	Leu	Arg	His	Lys	Met	Thr	Leu Ile
290				295						300				
Ser	Pro	Ser	Val	Leu	Lys	Lys	Tyr	Gly	Ile	Pro	Phe	Asp	Lys	Ile Thr
305				310						315				320
Gln	Glu	Ala	Gly	Glu	Phe	Met	Ile	Thr	Phe	Pro	Tyr	Gly	Tyr	His Ala
			325					330					335	
Gly	Phe	Asn	His	Gly	Phe	Asn	Cys	Ala	Glu	Ser	Thr	Asn	Phe	Ala Thr
		340					345					350		
Val	Arg	Trp	Ile	Asp	Tyr	Gly	Lys	Val	Ala	Lys	Leu	Cys	Thr	Cys Arg
	355					360					365			
Lys	Asp	Met	Val	Lys	Ile	Ser	Met	Asp	Ile	Phe	Val	Arg	Lys	Phe Gln
370				375						380				
Pro	Asp	Arg	Tyr	Gln	Leu	Trp	Lys	Gln	Gly	Lys	Asp	Ile	Tyr	Thr Ile
385				390						395				400
Asp	His	Thr	Lys	Pro	Thr	Pro	Ala	Ser	Thr	Pro	Glu	Val	Lys	Ala Trp
			405					410					415	
Leu	Gln	Arg	Arg	Arg	Lys	Val	Arg	Lys	Ala	Ser	Arg	Ser	Phe	Gln Cys
		420					425					430		
Ala	Arg	Ser	Thr	Ser	Lys	Arg	Pro	Lys	Ala	Asp	Glu	Glu	Glu	Glu Val
	435					440					445			
Ser	Asp	Glu	Val	Asp	Gly	Ala	Glu	Val	Pro	Asn	Pro	Asp	Ser	Val Thr
450				455						460				
Asp	Asp	Leu	Lys	Val	Ser	Glu	Lys	Ser	Glu	Ala	Ala	Val	Lys	Leu Arg
465				470					475					480
Asn	Thr	Glu	Ala	Ser	Ser	Glu	Glu	Glu	Ser	Ser	Ala	Ser	Arg	Met Gln
			485				490						495	
Val	Glu	Gln	Asn	Leu	Ser	Asp	His	Ile	Lys	Leu	Ser	Gly	Asn	Ser Cys
	500						505					510		
Leu	Ser	Thr	Ser	Val	Thr	Glu	Asp	Ile	Lys	Thr	Glu	Asp	Asp	Lys Ala
	515					520					525			
Tyr	Ala	Tyr	Arg	Ser	Val	Pro	Ser	Ile	Ser	Ser	Glu	Ala	Asp	Asp Ser
	530				535						540			
Ile	Pro	Leu	Ser	Thr	Gly	Tyr	Glu	Lys	Pro	Glu	Lys	Ser	Asp	Pro Ser
545				550						555				560
Glu	Leu	Ser	Trp	Pro	Lys	Ser	Pro	Glu	Ser	Cys	Ser	Ser	Val	Ala Glu
			565				570					575		
Ser	Asn	Gly	Val	Leu	Thr	Glu	Gly	Glu	Ser	Asp	Val	Glu	Ser	His

5235

1090

1095

1100

1104

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 <211> 329
 <212> PRT
 <213> Homo sapiens

<400> 3504
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 20 25 30
 His Arg Ser Arg Ala Trp Thr Cys Tyr Leu Ala Ile Arg Met Leu Met
 35 40 45
 Ala Thr Cys Cys Pro Ser Pro Thr Thr Thr Ala Cys Thr Gly Pro Trp
 50 55 60
 Gln Arg Ala Pro Pro Leu Arg Leu Leu Val Gln Lys Arg Glu Ala Asp
 65 70 75 80
 Ser Ser Gly Leu Ala Phe Ala Ser Asn Ser Leu Gln Arg Arg Lys Lys
 85 90 95
 Gly Leu Leu Leu Arg Pro Val Ala Pro Leu Arg Thr Arg Pro Pro Leu
 100 105 110
 Leu Ile Ser Leu Pro Gln Asp Phe Arg Gln Val Ser Ser Val Ile Asp
 115 120 125
 Val Asp Leu Leu Pro Glu Thr His Arg Arg Val Arg Leu His Lys His
 130 135 140
 Gly Ser Asp Arg Pro Leu Gly Phe Tyr Ile Arg Asp Gly Met Ser Val
 145 150 155 160
 Arg Val Ala Pro Gln Gly Leu Glu Arg Val Pro Gly Ile Phe Ile Ser
 165 170 175
 Arg Leu Val Arg Gly Gly Leu Ala Glu Ser Thr Gly Leu Leu Ala Val
 180 185 190
 Ser Asp Glu Ile Leu Glu Val Asn Gly Ile Glu Val Ala Gly Lys Thr
 195 200 205
 Leu Asn Gln Val Thr Asp Met Met Val Ala Asn Ser His Asn Leu Ile
 210 215 220
 Val Thr Val Lys Pro Ala Asn Gln Arg Asn Asn Val Val Arg Gly Ala
 225 230 235 240
 Ser Gly Arg Leu Thr Gly Pro Pro Ser Ala Gly Pro Gly Pro Ala Glu
 245 250 255
 Pro Asp Ser Asp Asp Asp Ser Ser Asp Leu Val Ile Glu Asn Arg Gln
 260 265 270
 Pro Pro Ser Ser Asn Gly Leu Ser Gln Gly Pro Pro Cys Trp Asp Leu
 275 280 285
 His Pro Gly Cys Arg His Pro Gly Thr Arg Ser Ser Leu Pro Ser Leu
 290 295 300
 Asp Asp Gln Glu Gln Ala Ser Ser Gly Trp Gly Ser Arg Ile Arg Gly
 305 310 315 320
 Asp Gly Ser Gly Phe Ser Leu
 325 327

<210> 3505
 <211> 972
 <212> PRT
 <213> Homo sapiens

<400> 3505

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Trp Leu Cys Ser Ser Leu Lys Met Ala Ala Gln Pro Pro Arg Gly Ile
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Arg Leu Ser Ala Leu Cys Pro Lys Phe Leu His Thr Asn Ser Thr Ser
      35      40      45
His Thr Trp Pro Phe Ser Ala Val Ala Glu Leu Ile Asp Asn Ala Tyr
      50      55      60
Asp Pro Asp Val Asn Ala Lys Gln Ile Trp Ile Asp Lys Thr Val Ile
      65      70      75      80
Asn Asp His Ile Cys Leu Thr Phe Thr Asp Asn Gly Asn Gly Met Thr
      85      90      95
Ser Asp Lys Leu His Lys Met Leu Ser Phe Gly Phe Ser Asp Lys Val
      100      105      110
Thr Met Asn Gly His Val Pro Val Gly Leu Tyr Gly Asn Gly Phe Lys
      115      120      125
Ser Gly Ser Met Arg Leu Gly Lys Asp Ala Ile Val Phe Thr Lys Asn
      130      135      140
Gly Glu Ser Met Ser Val Gly Leu Leu Ser Gln Thr Tyr Leu Glu Val
145      150      155      160
Ile Lys Ala Glu His Val Val Val Pro Ile Val Ala Phe Asn Lys His
      165      170      175
Arg Gln Met Ile Asn Leu Ala Glu Ser Lys Ala Ser Leu Ala Ala Ile
      180      185      190
Leu Glu His Ser Leu Phe Ser Thr Glu Gln Lys Leu Leu Ala Glu Leu
      195      200      205
Asp Ala Ile Ile Gly Lys Lys Gly Thr Arg Ile Ile Ile Trp Asn Leu
      210      215      220
Arg Ser Tyr Lys Asn Ala Thr Glu Phe Asp Phe Glu Lys Asp Lys Tyr
225      230      235      240
Asp Ile Arg Ile Pro Glu Asp Leu Asp Glu Ile Thr Gly Lys Lys Gly
      245      250      255
Tyr Lys Lys Gln Glu Arg Met Asp Gln Ile Ala Pro Glu Ser Asp Tyr
      260      265      270
Ser Leu Arg Ala Tyr Cys Ser Ile Leu Tyr Leu Lys Pro Arg Met Gln
      275      280      285
Ile Ile Leu Arg Gly Gln Lys Val Lys Thr Gln Leu Val Ser Lys Ser
      290      295      300
Leu Ala Tyr Ile Glu Arg Asp Val Tyr Arg Pro Lys Phe Leu Ser Lys
305      310      315      320
Thr Val Arg Ile Thr Phe Gly Phe Asn Cys Arg Asn Lys Asp His Tyr
      325      330      335
Gly Ile Met Met Tyr His Arg Asn Arg Leu Ile Lys Ala Tyr Glu Lys
      340      345      350
Val Gly Cys Gln Leu Arg Ala Asn Asn Met Gly Val Gly Val Val Gly
      355      360      365
Ile Ile Glu Cys Asn Phe Leu Lys Pro Thr His Asn Lys Gln Asp Phe
      370      375      380
Asp Tyr Thr Asn Glu Tyr Arg Leu Thr Ile Thr Ala Leu Gly Glu Lys
385      390      395      400
Leu Asn Asp Tyr Trp Asn Glu Met Lys Val Lys Lys Asn Thr Glu Tyr
      405      410      415
Pro Leu Asn Leu Pro Val Glu Asp Ile Gln Lys Arg Pro Asp Gln Thr
      420      425      430
Trp Val Gln Cys Asp Ala Cys Leu Lys Trp Arg Lys Leu Pro Asp Gly
      435      440      445
Met Asp Gln Leu Pro Glu Lys Trp Tyr Cys Ser Asn Asn Pro Asp Pro
      450      455      460
Gln Phe Arg Asn Cys Glu Val Pro Glu Glu Pro Glu Asp Glu Asp Leu
465      470      475      480
Val His Pro Thr Tyr Glu Lys Thr Tyr Lys Lys Thr Asn Lys Glu Lys
      485      490      495
Phe Arg Ile Arg Gln Pro Glu Met Ile Pro Arg Ile Asn Ala Glu Leu

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500					505					510						
Leu	Phe	Arg	Pro	Thr	Ala	Leu	Ser	Thr	Pro	Ser	Phe	Ser	Ser	Pro	Lys	
515					520					525						
Glu	Ser	Val	Ser	Lys	Arg	Arg	His	Leu	Ser	Glu	Gly	Thr	Asn	Ser	Tyr	
530					535					540						
Ala	Thr	Arg	Leu	Leu	Asn	Asn	His	Gln	Val	Pro	Pro	Gln	Ser	Glu	Pro	
545					550					555					560	
Glu	Ser	Asn	Ser	Leu	Lys	Arg	Arg	Leu	Ser	Thr	Arg	Ser	Ser	Ile	Leu	
565					570					575					580	
Asn	Ala	Lys	Asn	Arg	Arg	Leu	Ser	Ser	Gln	Phe	Glu	Asn	Ser	Val	Tyr	
580					585					590					595	
Lys	Gly	Asp	Asp	Asp	Glu	Asp	Val	Ile	Ile	Leu	Glu	Glu	Asn	Ser		
595					600					605					610	
Thr	Pro	Lys	Pro	Ala	Val	Asp	His	Asp	Ile	Asp	Met	Lys	Ser	Glu	Gln	
610					615					620					625	
Ser	His	Val	Glu	Gln	Gly	Gly	Val	Gln	Val	Glu	Phe	Val	Gly	Asp	Ser	
625					630					635					640	
Glu	Pro	Cys	Gly	Gln	Thr	Gly	Ser	Thr	Ser	Thr	Ser	Ser	Ser	Arg	Cys	
645					650					655					660	
Asp	Gln	Gly	Asn	Thr	Ala	Ala	Thr	Gln	Thr	Glu	Val	Pro	Ser	Leu	Val	
660					665					670					675	
Val	Lys	Lys	Glu	Glu	Thr	Val	Glu	Asp	Glu	Ile	Asp	Val	Arg	Asn	Asp	
675					680					685					690	
Ala	Val	Ile	Leu	Pro	Ser	Cys	Val	Glu	Ala	Glu	Ala	Lys	Ile	His	Glu	
690					695					700					705	
Thr	Gln	Glu	Thr	Thr	Asp	Lys	Ser	Ala	Asp	Asp	Ala	Gly	Cys	Gln	Leu	
710					715					720					725	
Gln	Glu	Leu	Arg	Asn	Gln	Leu	Leu	Leu	Val	Thr	Glu	Glu	Lys	Glu	Asn	
725					730					735					740	
Tyr	Lys	Arg	Gln	Cys	His	Met	Phe	Thr	Asp	Gln	Ile	Lys	Val	Leu	Gln	
740					745					750					755	
Gln	Arg	Ile	Leu	Glu	Met	Asn	Asp	Lys	Tyr	Val	Lys	Lys	Glu	Thr	Cys	
755					760					765					770	
His	Gln	Ser	Thr	Glu	Thr	Asp	Ala	Val	Phe	Leu	Leu	Glu	Ser	Ile	Asn	
770					775					780					785	
Gly	Lys	Ser	Glu	Ser	Pro	Asp	His	Met	Val	Ser	Gln	Tyr	Gln	Gln	Ala	
785					790					795					800	
Leu	Glu	Glu	Ile	Glu	Arg	Leu	Lys	Lys	Gln	Cys	Ser	Ala	Leu	Gln	His	
805					810					815					820	
Val	Lys	Ala	Glu	Cys	Ser	Gln	Cys	Ser	Asn	Asn	Glu	Ser	Lys	Ser	Glu	
820					825					830					835	
Met	Asp	Glu	Met	Ala	Val	Gln	Leu	Asp	Asp	Val	Phe	Arg	Gln	Leu	Asp	
835					840					845					850	
Lys	Cys	Ser	Ile	Glu	Arg	Asp	Gln	Tyr	Lys	Ser	Glu	Val	Glu	Leu	Leu	
850					855					860					865	
Glu	Met	Glu	Lys	Ser	Gln	Ile	Arg	Ser	Gln	Cys	Glu	Glu	Leu	Lys	Thr	
865					870					875					880	
Glu	Val	Glu	Gln	Leu	Lys	Ser	Thr	Asn	Gln	Gln	Thr	Ala	Thr	Asp	Val	
885					890					895					900	
Ser	Thr	Ser	Ser	Asn	Ile	Glu	Glu	Ser	Val	Asn	His	Met	Asp	Gly	Glu	
900					905					910					915	
Ser	Leu	Lys	Leu	Arg	Ser	Leu	Arg	Val	Asn	Val	Gly	Gln	Leu	Leu	Ala	
915					920					925					930	
Met	Ile	Val	Pro	Asp	Leu	Asp	Leu	Gln	Gln	Val	Asn	Tyr	Asp	Val	Asp	
930					935					940					945	
Val	Val	Asp	Glu	Ile	Leu	Gly	Gln	Val	Val	Glu	Gln	Met	Ser	Glu	Ile	
945					950					955					960	
Ser	Ser	Thr														
963																

<210> 3506

<211> 706

<212> PRT

<213> Homo sapiens

<400> 3506

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Arg Pro Pro Glu Ala Gly Gly Arg Tyr Arg Ala Gly Gly Arg Arg Gln
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 20          25          30
Gln Gly Gly Arg Thr Arg Arg Ala Met Asp Arg Pro Ala Ala Ala
 35          40          45
Ala Ala Gly Cys Glu Gly Gly Gly Pro Asn Pro Gly Pro Ala Gly
 50          55          60
Gly Arg Arg Pro Pro Arg Ala Ala Gly Gly Ala Thr Ala Gly Ser Arg
 65          70          75          80
Gln Pro Ser Val Glu Thr Leu Asp Ser Pro Thr Gly Ser His Val Glu
 85          90          95
Trp Cys Lys Gln Leu Ile Ala Ala Thr Ile Ser Ser Gln Ile Ser Gly
100          105          110
Ser Val Thr Ser Glu Asn Val Ser Arg Asp Tyr Lys Ala Leu Arg Asp
115          120          125
Gly Asn Lys Leu Ala Gln Met Glu Glu Ala Pro Leu Phe Pro Gly Glu
130          135          140
Ser Ile Lys Ala Ile Val Lys Asp Val Met Tyr Ile Cys Pro Phe Met
145          150          155          160
Gly Ala Val Ser Gly Thr Leu Thr Val Thr Asp Phe Lys Leu Tyr Phe
165          170          175
Lys Asn Val Glu Arg Asp Pro His Phe Ile Leu Asp Val Pro Leu Gly
180          185          190
Val Ile Ser Arg Val Glu Lys Ile Gly Ala Gln Ser His Gly Asp Asn
195          200          205
Ser Cys Gly Ile Glu Ile Val Cys Lys Asp Met Arg Asn Leu Arg Leu
210          215          220
Ala Tyr Lys Gln Glu Glu Gln Ser Lys Leu Gly Ile Phe Glu Asn Leu
225          230          235          240
Asn Lys His Ala Phe Pro Leu Ser Asn Gly Gln Ala Leu Phe Ala Phe
245          250          255
Ser Tyr Lys Glu Lys Phe Pro Ile Asn Gly Trp Lys Val Tyr Asp Pro
260          265          270
Val Ser Glu Tyr Lys Arg Gln Gly Leu Pro Asn Glu Ser Trp Lys Ile
275          280          285
Ser Lys Ile Asn Ser Asn Tyr Glu Phe Cys Asp Thr Tyr Pro Ala Ile
290          295          300
Ile Val Val Pro Thr Ser Val Lys Asp Asp Asp Leu Ser Lys Val Ala
305          310          315          320
Val Phe Leu Ala Lys Gly Arg Val Pro Val Leu Ser Trp Ile His Pro
325          330          335
Glu Ser Gln Ala Thr Ile Thr Arg Cys Ser Gln Pro Leu Val Gly Pro
340          345          350
Asn Asp Lys Arg Cys Lys Glu Asp Glu Lys Tyr Leu Gln Thr Ile Met
355          360          365
Asp Ala Asn Ala Gln Ser His Lys Leu Ile Ile Phe Asp Ala Arg Gln
370          375          380
Asn Ser Val Ala Asp Thr Asn Lys Thr Lys Gly Gly Tyr Glu Ser
385          390          395          400
Glu Ser Ala Tyr Pro Asn Ala Glu Leu Val Phe Leu Glu Ile His Asn
405          410          415
Ile His Val Met Arg Glu Ser Leu Arg Lys Leu Lys Glu Ile Val Tyr
420          425          430
Pro Ser Ile Asp Glu Ala Arg Trp Leu Ser Asn Val Asp Gly Thr His
435          440          445
Trp Leu Glu Tyr Ile Arg Met Leu Leu Ala Gly Ala Val Arg Ile Ala
450          455          460
Asp Lys Ile Glu Ser Gly Lys Thr Ser Val Val Val His Cys Ser Asp

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465 470 475 480
 Gly Trp Asp Arg Thr Ala Gln Leu Thr Ser Leu Ala Met Leu Met Leu
 485 490 495
 Asp Ser Tyr Tyr Arg Thr Ile Lys Gly Phe Glu Thr Leu Val Glu Lys
 500 505 510
 Glu Trp Ile Ser Phe Gly His Arg Phe Ala Leu Arg Val Gly His Gly
 515 520 525
 Asn Asp Asn His Ala Asp Ala Asp Arg Ser Pro Ile Phe Leu Gln Phe
 530 535 540
 Val Asp Cys Val Trp Gln Met Thr Arg Gln Phe Pro Ser Ala Phe Glu
 545 550 555 560
 Phe Asn Glu Leu Phe Leu Ile Thr Ile Leu Asp His Leu Tyr Ser Cys
 565 570 575
 Leu Phe Gly Thr Phe Leu Cys Asn Cys Glu Gln Gln Arg Phe Lys Glu
 580 585 590
 Asp Val Tyr Thr Lys Thr Ile Ser Leu Trp Ser Tyr Ile Asn Ser Gln
 595 600 605
 Leu Asp Glu Phe Ser Asn Pro Phe Phe Val Asn Tyr Glu Asn His Val
 610 615 620
 Leu Tyr Pro Val Ala Ser Leu Ser His Leu Glu Leu Trp Val Asn Tyr
 625 630 635 640
 Tyr Val Arg Trp Asn Pro Arg Met Arg Pro Gln Met Pro Ile His Gln
 645 650 655
 Asn Leu Lys Glu Leu Leu Ala Val Arg Ala Glu Leu Gln Lys Arg Val
 660 665 670
 Glu Gly Leu Gln Arg Glu Val Ala Thr Arg Ala Val Ser Ser Ser Ser
 675 680 685
 Glu Arg Gly Ser Ser Pro Ser His Phe Ala Thr Ser Val His Thr Leu
 690 695 700
 Val
 705

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 <211> 725
 <212> PRT
 <213> Homo sapiens

<400> 3507
 Gly Ser Ser Ile Lys Ile Arg Leu Thr Val Leu Cys Ala Lys Asn Leu
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 Ala Lys Lys Asp Phe Phe Arg Leu Pro Asp Pro Phe Ala Lys Ile Val
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 Val Asp Gly Ser Gly Gln Cys His Ser Thr Asp Thr Val Lys Asn Thr
 35 40 45
 Leu Asp Pro Lys Trp Asn Gln His Tyr Asp Leu Tyr Val Gly Lys Thr
 50 55 60
 Asp Ser Ile Thr Ile Ser Val Trp Asn His Lys Lys Ile His Lys Lys
 65 70 75 80
 Gln Gly Ala Gly Phe Leu Gly Cys Val Arg Leu Leu Ser Asn Ala Ile
 85 90 95
 Ser Arg Leu Lys Asp Thr Gly Tyr Gln Arg Leu Asp Leu Cys Lys Leu
 100 105 110
 Asn Pro Ser Asp Thr Asp Ala Val Arg Gly Gln Ile Val Val Ser Leu
 115 120 125
 Gln Thr Arg Asp Arg Ile Gly Thr Gly Gly Ser Val Val Asp Cys Arg
 130 135 140
 Gly Leu Leu Glu Asn Glu Gly Thr Val Tyr Glu Asp Ser Gly Pro Gly
 145 150 155 160
 Arg Pro Leu Ser Cys Phe Met Glu Glu Pro Ala Pro Tyr Thr Asp Ser
 165 170 175
 Thr Gly Ala Ala Ala Gly Gly Gly Asn Cys Arg Phe Val Glu Ser Pro

5241

690 695 700
 Leu Tyr Glu Lys Leu Leu Thr Ala Val Glu Glu Thr Cys Gly Phe Ala
 705 710 715 720
 Val Glu
 722

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 <211> 2129
 <212> PRT
 <213> Homo sapiens

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 Ser Trp Ile Glu Lys Arg Glu Ile Gln Thr Glu Arg Ala Asn Leu Thr
 20 25 30
 Ile Leu Phe Asp Lys Tyr Leu Pro Thr Cys Leu Asp Thr Leu Arg Thr
 35 40 45
 Arg Phe Lys Lys Ile Ile Pro Ile Pro Glu Gln Ser Met Val Gln Met
 50 55 60
 Val Cys His Leu Leu Glu Cys Leu Leu Thr Thr Glu Asp Ile Pro Ala
 65 70 75 80
 Asp Cys Pro Lys Glu Ile Tyr Glu His Tyr Phe Val Phe Ala Ala Ile
 85 90 95
 Trp Ala Phe Gly Gly Ala Met Val Gln Asp Gln Leu Val Asp Tyr Arg
 100 105 110
 Ala Glu Phe Ser Lys Trp Trp Leu Thr Glu Phe Lys Thr Val Lys Phe
 115 120 125
 Pro Ser Gln Gly Thr Ile Phe Asp Tyr Tyr Ile Asp Pro Glu Thr Lys
 130 135 140
 Lys Phe Glu Pro Trp Ser Lys Leu Val Pro Gln Phe Glu Phe Asp Pro
 145 150 155 160
 Glu Met Pro Leu Gln Ala Cys Leu Val His Thr Ser Glu Thr Ile Arg
 165 170 175
 Val Cys Tyr Phe Met Glu Arg Leu Met Ala Arg Gln Arg Pro Val Met
 180 185 190
 Leu Val Gly Thr Ala Gly Thr Gly Lys Ser Val Leu Val Gly Ala Lys
 195 200 205
 Leu Ala Ser Leu Asp Pro Glu Ala Tyr Leu Val Lys Asn Val Pro Phe
 210 215 220
 Asn Tyr Tyr Thr Thr Ser Ala Met Leu Gln Ala Val Leu Glu Lys Pro
 225 230 235 240
 Leu Glu Lys Lys Ala Gly Arg Asn Tyr Gly Pro Pro Gly Asn Lys Lys
 245 250 255
 Leu Ile Tyr Phe Ile Asp Asp Met Asn Met Pro Glu Val Asp Ala Tyr
 260 265 270
 Gly Thr Val Gln Pro His Thr Ile Ile Arg Gln His Leu Asp Tyr Gly
 275 280 285
 His Trp Tyr Asp Arg Ser Lys Leu Ser Leu Lys Glu Ile Thr Asn Val
 290 295 300
 Gln Tyr Val Ser Cys Met Asn Pro Thr Ala Gly Ser Phe Thr Ile Asn
 305 310 315 320
 Pro Arg Leu Gln Arg His Phe Ser Val Phe Val Leu Ser Phe Pro Gly
 325 330 335
 Ala Asp Ala Leu Ser Ser Ile Tyr Ser Ile Ile Leu Thr Gln His Leu
 340 345 350
 Lys Leu Gly Asn Phe Pro Ala Ser Leu Gln Lys Ser Ile Pro Pro Leu
 355 360 365
 Ile Asp Leu Ala Leu Ala Phe His Gln Lys Ile Ala Thr Thr Phe Leu
 370 375 380
 Pro Thr Gly Ile Lys Phe His Tyr Ile Phe Asn Leu Arg Asp Phe Ala

385		390		395		400									
Asn	Ile	Phe	Gln	Gly	Ile	Leu	Phe	Ser	Ser	Val	Glu	Cys	Val	Lys	Ser
			405						410					415	
Thr	Trp	Asp	Leu	Ile	Arg	Leu	Tyr	Leu	His	Glu	Ser	Asn	Arg	Val	Tyr
			420					425						430	
Arg	Asp	Lys	Met	Val	Glu	Glu	Lys	Asp	Phe	Asp	Leu	Phe	Asp	Lys	Ile
		435					440					445			
Gln	Thr	Glu	Val	Leu	Lys	Lys	Thr	Phe	Asp	Asp	Ile	Glu	Asp	Pro	Val
	450					455					460				
Glu	Gln	Thr	Gln	Ser	Pro	Asn	Leu	Tyr	Cys	His	Phe	Ala	Asn	Gly	Ile
465					470					475				480	
Gly	Glu	Pro	Lys	Tyr	Met	Pro	Val	Gln	Ser	Trp	Glu	Leu	Leu	Thr	Gln
			485					490						495	
Thr	Leu	Val	Glu	Ala	Leu	Glu	Asn	His	Asn	Glu	Val	Asn	Thr	Val	Met
		500						505					510		
Asp	Leu	Val	Leu	Phe	Glu	Asp	Ala	Met	Arg	His	Val	Cys	His	Ile	Asn
	515						520					525			
Arg	Ile	Leu	Glu	Ser	Pro	Arg	Gly	Asn	Ala	Leu	Leu	Val	Gly	Val	Gly
	530					535					540				
Gly	Ser	Gly	Lys	Gln	Ser	Leu	Thr	Arg	Leu	Ala	Ala	Phe	Ile	Ser	Ser
545					550					555				560	
Met	Asp	Val	Phe	Gln	Ile	Thr	Leu	Arg	Lys	Gly	Tyr	Gln	Ile	Gln	Asp
			565					570						575	
Phe	Lys	Met	Asp	Leu	Ala	Ser	Leu	Cys	Leu	Lys	Ala	Gly	Val	Lys	Asn
		580						585					590		
Leu	Asn	Thr	Val	Phe	Leu	Met	Thr	Asp	Ala	Gln	Val	Ala	Asp	Glu	Arg
	595						600					605			
Phe	Leu	Val	Leu	Ile	Asn	Asp	Leu	Leu	Ala	Ser	Gly	Glu	Ile	Pro	Asp
	610					615					620				
Leu	Tyr	Ser	Asp	Asp	Glu	Val	Glu	Asn	Ile	Ile	Ser	Asn	Val	Arg	Asn
625					630					635				640	
Glu	Val	Lys	Ser	Gln	Gly	Leu	Val	Asp	Asn	Arg	Glu	Asn	Cys	Trp	Lys
			645					650						655	
Phe	Phe	Ile	Asp	Arg	Ile	Arg	Arg	Gln	Leu	Lys	Val	Thr	Leu	Cys	Phe
		660						665					670		
Ser	Pro	Val	Gly	Asn	Lys	Leu	Arg	Val	Arg	Ser	Arg	Lys	Phe	Pro	Ala
		675					680					685			
Ile	Val	Asn	Cys	Thr	Ala	Ile	His	Trp	Phe	His	Glu	Trp	Pro	Gln	Gln
	690					695					700				
Ala	Leu	Glu	Ser	Val	Ser	Leu	Arg	Phe	Leu	Gln	Asn	Thr	Glu	Gly	Ile
705					710					715				720	
Glu	Pro	Thr	Val	Lys	Gln	Ser	Ile	Ser	Lys	Phe	Met	Ala	Phe	Val	His
			725					730						735	
Thr	Ser	Val	Asn	Gln	Thr	Ser	Gln	Ser	Tyr	Leu	Ser	Asn	Glu	Gln	Arg
		740					745						750		
Tyr	Asn	Tyr	Thr	Thr	Pro	Lys	Ser	Phe	Leu	Glu	Phe	Ile	Arg	Leu	Tyr
	755					760						765			
Gln	Ser	Leu	Leu	His	Arg	His	Arg	Lys	Glu	Leu	Lys	Cys	Lys	Thr	Glu
	770				775						780				
Arg	Leu	Glu	Asn	Gly	Leu	Leu	Lys	Leu	His	Ser	Thr	Ser	Ala	Gln	Val
785					790					795				800	
Asp	Asp	Leu	Lys	Ala	Lys	Leu	Ala	Ala	Gln	Glu	Val	Glu	Leu	Lys	Gln
			805						810					815	
Lys	Asn	Glu	Asp	Ala	Asp	Lys	Leu	Ile	Gln	Val	Val	Gly	Val	Glu	Thr
		820					825						830		
Asp	Lys	Val	Ser	Arg	Glu	Lys	Ala	Met	Ala	Asp	Glu	Glu	Glu	Gln	Lys
	835						840					845			
Val	Ala	Val	Ile	Met	Leu	Glu	Val	Lys	Gln	Lys	Gln	Lys	Asp	Cys	Glu
	850					855					860				
Glu	Asp	Leu	Ala	Lys	Ala	Glu	Pro	Ala	Leu	Thr	Ala	Ala	Gln	Ala	Ala
865					870					875				880	
Leu	Asn	Thr	Leu	Asn	Lys	Thr	Asn	Leu	Thr	Glu	Leu	Lys	Ser	Phe	Gly
			885						890					895	
Ser	Pro	Pro	Leu	Ala	Val	Ser	Asn	Val	Ser	Ala	Ala	Val	Met	Val	Leu

Met	Ala	Pro	Arg	Gly	Arg	Val	Pro	Lys	Asp	Arg	Ser	Trp	Lys	Ala	Ala
	915						920					925			
Lys	Val	Thr	Met	Ala	Lys	Val	Asp	Gly	Phe	Leu	Asp	Ser	Leu	Ile	Asn
	930						935					940			
Phe	Asn	Lys	Glu	Asn	Ile	His	Glu	Asn	Cys	Leu	Lys	Ala	Ile	Arg	Pro
	945				950					955					960
Tyr	Leu	Gln	Asp	Pro	Glu	Phe	Asn	Pro	Glu	Phe	Val	Ala	Thr	Lys	Ser
			965						970					975	
Tyr	Ala	Ala	Ala	Gly	Leu	Cys	Ser	Trp	Val	Ile	Asn	Ile	Val	Arg	Phe
			980					985					990		
Tyr	Glu	Val	Phe	Cys	Asp	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Asn	Lys
	995						1000					1005			
Ala	Thr	Ala	Asp	Leu	Thr	Ala	Ala	Gln	Glu	Lys	Leu	Ala	Ala	Ile	Lys
	1010					1015					1020				
Ala	Lys	Ile	Ala	His	Leu	Asn	Glu	Asn	Leu	Ala	Lys	Leu	Thr	Ala	Arg
	1025			1030					1035					1040	
Phe	Glu	Lys	Ala	Thr	Ala	Asp	Lys	Leu	Lys	Cys	Gln	Gln	Glu	Ala	Glu
			1045						1050				1055		
Val	Thr	Ala	Val	Thr	Ile	Ser	Leu	Ala	Asn	Arg	Leu	Val	Gly	Gly	Leu
	1060						1065					1070			
Ala	Ser	Glu	Asn	Val	Arg	Trp	Ala	Asp	Ala	Val	Gln	Asn	Phe	Lys	Gln
	1075					1080					1085				
Gln	Glu	Arg	Thr	Leu	Cys	Gly	Asp	Ile	Leu	Leu	Ile	Thr	Ala	Phe	Ile
	1090				1095				1100						
Ser	Tyr	Leu	Gly	Phe	Phe	Thr	Lys	Lys	Tyr	Arg	Gln	Ser	Leu	Leu	Asp
	1105			1110					1115					1120	
Arg	Thr	Trp	Arg	Pro	Tyr	Leu	Ser	Gln	Leu	Lys	Thr	Pro	Ile	Pro	Val
		1125						1130				1135			
Thr	Pro	Ala	Leu	Asp	Pro	Leu	Arg	Met	Leu	Met	Asp	Asp	Ala	Asp	Val
	1140					1145					1150				
Ala	Ala	Trp	Gln	Asn	Glu	Gly	Leu	Pro	Ala	Asp	Arg	Met	Ser	Val	Glu
	1155				1160				1165						
Asn	Ala	Thr	Ile	Leu	Ile	Asn	Cys	Glu	Arg	Trp	Pro	Leu	Met	Val	Asp
	1170				1175				1180						
Pro	Gln	Leu	Gln	Gly	Ile	Lys	Trp	Ile	Lys	Asn	Lys	Tyr	Gly	Glu	Asp
	1185			1190					1195					1200	
Leu	Arg	Val	Thr	Gln	Ile	Gly	Gln	Lys	Gly	Tyr	Leu	Gln	Ile	Ile	Glu
		1205					1210					1215			
Gln	Ala	Leu	Glu	Ala	Gly	Ala	Val	Val	Leu	Ile	Glu	Asn	Leu	Glu	Glu
	1220						1225				1230				
Ser	Ile	Asp	Pro	Val	Leu	Gly	Pro	Leu	Leu	Gly	Arg	Glu	Val	Ile	Lys
	1235					1240				1245					
Lys	Gly	Arg	Phe	Ile	Lys	Ile	Gly	Asp	Lys	Glu	Cys	Glu	Tyr	Asn	Pro
	1250				1255				1260						
Lys	Phe	Arg	Leu	Ile	Leu	His	Thr	Lys	Leu	Ala	Asn	Pro	His	Tyr	Gln
	1265			1270					1275					1280	
Pro	Glu	Leu	Gln	Ala	Gln	Ala	Thr	Leu	Ile	Asn	Phe	Thr	Val	Thr	Arg
		1285					1290					1295			
Asp	Gly	Leu	Glu	Asp	Gln	Leu	Leu	Ala	Ala	Val	Val	Ser	Met	Glu	Arg
	1300					1305					1310				
Pro	Asp	Leu	Glu	Gln	Leu	Lys	Ser	Asp	Leu	Thr	Lys	Gln	Gln	Asn	Gly
	1315				1320						1325				
Phe	Lys	Ile	Thr	Leu	Lys	Thr	Leu	Glu	Asp	Ser	Leu	Leu	Ser	Arg	Leu
	1330				1335				1340						
Ser	Ser	Ala	Ser	Gly	Asn	Phe	Leu	Gly	Glu	Thr	Val	Leu	Val	Glu	Asn
	1345			1350					1355					1360	
Leu	Glu	Ile	Thr	Lys	Gln	Thr	Ala	Ala	Glu	Val	Glu	Lys	Lys	Val	Gln
		1365					1370				1375				
Glu	Ala	Lys	Val	Thr	Glu	Val	Lys	Ile	Asn	Glu	Ala	Arg	Glu	His	Tyr
	1380					1385					1390				
Arg	Pro	Ala	Ala	Ala	Arg	Ala	Ser	Leu	Leu	Tyr	Phe	Ile	Met	Asn	Asp
	1395					1400					1405				
Leu	Ser	Lys	Ile	His	Pro	Met	Tyr	Gln	Phe	Ser	Leu	Lys	Ala	Phe	Ser

1410 1415 1420
 Ile Val Phe Gln Lys Ala Val Glu Arg Ala Ala Pro Asp Glu Ser Leu
 1425 1430 1435 1440
 Arg Glu Arg Val Ala Asn Leu Ile Asp Ser Ile Thr Phe Ser Val Tyr
 1445 1450 1455
 Gln Tyr Thr Ile Arg Gly Leu Phe Glu Cys Asp Lys Leu Thr Tyr Leu
 1460 1465 1470
 Ala Gln Leu Thr Phe Gln Ile Leu Leu Met Asn Arg Glu Val Asn Ala
 1475 1480 1485
 Val Glu Leu Asp Phe Leu Leu Arg Ser Pro Val Gln Thr Gly Thr Ala
 1490 1495 1500
 Ser Pro Val Glu Phe Leu Ser His Gln Ala Trp Gly Ala Val Lys Val
 1505 1510 1515 1520
 Leu Ser Ser Met Glu Glu Phe Ser Asn Leu Asp Arg Asp Ile Glu Gly
 1525 1530 1535
 Ser Ala Lys Ser Trp Lys Lys Phe Val Glu Ser Glu Cys Pro Glu Lys
 1540 1545 1550
 Glu Lys Leu Pro Gln Glu Trp Lys Asn Lys Thr Ala Leu Gln Arg Leu
 1555 1560 1565
 Cys Met Leu Arg Ala Met Arg Pro Asp Arg Met Thr Tyr Ala Leu Arg
 1570 1575 1580
 Asp Phe Val Glu Glu Lys Leu Gly Ser Lys Tyr Val Val Gly Arg Ala
 1585 1590 1595 1600
 Leu Asp Phe Ala Thr Ser Phe Glu Glu Ser Gly Pro Ala Thr Pro Met
 1605 1610 1615
 Phe Phe Ile Leu Ser Pro Gly Val Asp Pro Leu Lys Asp Val Glu Ser
 1620 1625 1630
 Gln Gly Arg Lys Leu Gly Tyr Thr Phe Asn Asn Gln Asn Phe His Asn
 1635 1640 1645
 Val Ser Leu Gly Gln Gly Gln Glu Val Val Ala Glu Ala Ala Leu Asp
 1650 1655 1660
 Leu Ala Ala Lys Lys Gly His Trp Val Ile Leu Gln Asn Thr Leu Glu
 1665 1670 1675 1680
 Met Cys Ser Arg Glu Thr Glu Phe Lys Ser Ile Leu Phe Ala Leu Cys
 1685 1690 1695
 Tyr Phe His Ala Val Val Ala Glu Arg Arg Lys Phe Gly Pro Gln Gly
 1700 1705 1710
 Trp Asn Arg Ser Tyr Pro Phe Asn Thr Gly Asp Leu Thr Ile Ser Val
 1715 1720 1725
 Asn Val Leu Tyr Asn Phe Leu Glu Ala Asn Ala Lys Val Pro Tyr Asp
 1730 1735 1740
 Asp Leu Arg Tyr Leu Phe Gly Glu Ile Met Tyr Gly Gly His Ile Thr
 1745 1750 1755 1760
 Asp Asp Trp Asp Arg Arg Leu Cys Arg Thr Tyr Leu Gly Glu Phe Ile
 1765 1770 1775
 Arg Pro Glu Met Leu Glu Gly Glu Leu Ser Leu Ala Pro Gly Phe Pro
 1780 1785 1790
 Leu Pro Gly Asn Met Asp Tyr Asn Gly Tyr His Gln Tyr Ile Asp Ala
 1795 1800 1805
 Glu Leu Pro Pro Glu Ser Pro Tyr Leu Tyr Gly Leu His Pro Asn Ala
 1810 1815 1820
 Glu Ile Gly Phe Leu Thr Gln Thr Ser Glu Lys Leu Phe Arg Thr Val
 1825 1830 1835 1840
 Leu Glu Leu Gln Pro Arg Asp Ser Gln Ala Arg Asp Gly Ala Gly Ala
 1845 1850 1855
 Thr Arg Glu Glu Lys Val Lys Ala Leu Leu Glu Glu Ile Leu Glu Arg
 1860 1865 1870
 Val Thr Asp Glu Phe Asn Ile Pro Glu Leu Met Ala Lys Val Glu Glu
 1875 1880 1885
 Arg Thr Pro Tyr Ile Val Val Ala Phe Gln Glu Cys Gly Arg Met Asn
 1890 1895 1900
 Ile Leu Thr Arg Glu Ile Gln Arg Ser Leu Arg Glu Leu Glu Leu Gly
 1905 1910 1915 1920
 Leu Lys Gly Glu Leu Thr Met Thr Ser His Met Glu Asn Leu Gln Asn

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<211> 2129
<212> PRT
<213> Homo sapiens
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5246

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				245					250					255	
Leu	Ile	Tyr	Phe	Ile	Asp	Asp	Met	Asn	Met	Pro	Glu	Val	Asp	Ala	Tyr
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Gly	Thr	Val	Gln	Pro	His	Thr	Ile	Ile	Arg	Gln	His	Leu	Asp	Tyr	Gly
		275					280					285			
His	Trp	Tyr	Asp	Arg	Ser	Lys	Leu	Ser	Leu	Lys	Glu	Ile	Thr	Asn	Val
	290					295					300				
Gln	Tyr	Val	Ser	Cys	Met	Asn	Pro	Thr	Ala	Gly	Ser	Phe	Thr	Ile	Asn
305					310					315				320	
Pro	Arg	Leu	Gln	Arg	His	Phe	Ser	Val	Phe	Val	Leu	Ser	Phe	Pro	Gly
			325					330						335	
Ala	Asp	Ala	Leu	Ser	Ser	Ile	Tyr	Ser	Ile	Ile	Leu	Thr	Gln	His	Leu
		340						345					350		
Lys	Leu	Gly	Asn	Phe	Pro	Ala	Ser	Leu	Gln	Lys	Ser	Ile	Pro	Pro	Leu
	355					360						365			
Ile	Asp	Leu	Ala	Leu	Ala	Phe	His	Gln	Lys	Ile	Ala	Thr	Thr	Phe	Leu
370						375					380				
Pro	Thr	Gly	Ile	Lys	Phe	His	Tyr	Ile	Phe	Asn	Leu	Arg	Asp	Phe	Ala
385					390					395				400	
Asn	Ile	Phe	Gln	Gly	Ile	Leu	Phe	Ser	Ser	Val	Glu	Cys	Val	Lys	Ser
			405					410						415	
Thr	Trp	Asp	Leu	Ile	Arg	Leu	Tyr	Leu	His	Glu	Ser	Asn	Arg	Val	Tyr
		420						425					430		
Arg	Asp	Lys	Met	Val	Glu	Glu	Lys	Asp	Phe	Asp	Leu	Phe	Asp	Lys	Ile
	435						440						445		
Gln	Thr	Glu	Val	Leu	Lys	Lys	Thr	Phe	Asp	Asp	Ile	Glu	Asp	Pro	Val
450						455					460				
Glu	Gln	Thr	Gln	Ser	Pro	Asn	Leu	Tyr	Cys	His	Phe	Ala	Asn	Gly	Ile
465					470					475				480	
Gly	Glu	Pro	Lys	Tyr	Met	Pro	Val	Gln	Ser	Trp	Glu	Leu	Leu	Thr	Gln
			485					490						495	
Thr	Leu	Val	Glu	Ala	Leu	Glu	Asn	His	Asn	Glu	Val	Asn	Thr	Val	Met
		500						505					510		
Asp	Leu	Val	Leu	Phe	Glu	Asp	Ala	Met	Arg	His	Val	Cys	His	Ile	Asn
	515						520					525			
Arg	Ile	Leu	Glu	Ser	Pro	Arg	Gly	Asn	Ala	Leu	Leu	Val	Gly	Val	Gly
530						535					540				
Gly	Ser	Gly	Lys	Gln	Ser	Leu	Thr	Arg	Leu	Ala	Ala	Phe	Ile	Ser	Ser
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Met	Asp	Val	Phe	Gln	Ile	Thr	Leu	Arg	Lys	Gly	Tyr	Gln	Ile	Gln	Asp
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Phe	Lys	Met	Asp	Leu	Ala	Ser	Leu	Cys	Leu	Lys	Ala	Gly	Val	Lys	Asn
		580						585					590		
Leu	Asn	Thr	Val	Phe	Leu	Met	Thr	Asp	Ala	Gln	Val	Ala	Asp	Glu	Arg
	595						600					605			
Phe	Leu	Val	Leu	Ile	Asn	Asp	Leu	Leu	Ala	Ser	Gly	Glu	Ile	Pro	Asp
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Leu	Tyr	Ser	Asp	Asp	Glu	Val	Glu	Asn	Ile	Ile	Ser	Asn	Val	Arg	Asn
625					630					635				640	
Glu	Val	Lys	Ser	Gln	Gly	Leu	Val	Asp	Asn	Arg	Glu	Asn	Cys	Trp	Lys
			645					650						655	
Phe	Phe	Ile	Asp	Arg	Ile	Arg	Arg	Gln	Leu	Lys	Val	Thr	Leu	Cys	Phe
		660						665					670		
Ser	Pro	Val	Gly	Asn	Lys	Leu	Arg	Val	Arg	Ser	Arg	Lys	Phe	Pro	Ala
	675						680					685			
Ile	Val	Asn	Cys	Thr	Ala	Ile	His	Trp	Phe	His	Glu	Trp	Pro	Gln	Gln
690						695					700				
Ala	Leu	Glu	Ser	Val	Ser	Leu	Arg	Phe	Leu	Gln	Asn	Thr	Glu	Gly	Ile
705					710					715				720	
Glu	Pro	Thr	Val	Lys	Gln	Ser	Ile	Ser	Lys	Phe	Met	Ala	Phe	Val	His
			725					730						735	
Thr	Ser	Val	Asn	Gln	Thr	Ser	Gln	Ser	Tyr	Leu	Ser	Asn	Glu	Gln	Arg

5248

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Lys Phe Arg Leu Ile Leu His Thr Lys Leu Ala Asn Pro His Tyr Gln		
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Pro Glu Leu Gln Ala Gln Ala Thr Leu Ile Asn Phe Thr Val Thr Arg		1280
	1285	1290
Asp Gly Leu Glu Asp Gln Leu Leu Ala Val Val Ser Met Glu Arg		1295
	1300	1305
Pro Asp Leu Glu Gln Leu Lys Ser Asp Leu Thr Lys Gln Gln Asn Gly		1310
	1315	1320
Phe Lys Ile Thr Leu Lys Thr Leu Glu Asp Ser Leu Leu Ser Arg Leu		1325
	1330	1335
Ser Ser Ala Ser Gly Asn Phe Leu Gly Glu Thr Val Leu Val Glu Asn		1340
1345	1350	1355
Leu Glu Ile Thr Lys Gln Thr Ala Ala Glu Val Glu Lys Lys Val Gln		1360
	1365	1370
Glu Ala Lys Val Thr Glu Val Lys Ile Asn Glu Ala Arg Glu His Tyr		1375
	1380	1385
Arg Pro Ala Ala Ala Arg Ala Ser Leu Leu Tyr Phe Ile Met Asn Asp		1390
	1395	1400
Leu Ser Lys Ile His Pro Met Tyr Gln Phe Ser Leu Lys Ala Phe Ser		1405
	1410	1415
Ile Val Phe Gln Lys Ala Val Glu Arg Ala Ala Pro Asp Glu Ser Leu		1420
1425	1430	1435
Arg Glu Arg Val Ala Asn Leu Ile Asp Ser Ile Thr Phe Ser Val Tyr		1440
	1445	1450
Gln Tyr Thr Ile Arg Gly Leu Phe Glu Cys Asp Lys Leu Thr Tyr Leu		1455
	1460	1465
Ala Gln Leu Thr Phe Gln Ile Leu Leu Met Asn Arg Glu Val Asn Ala		1470
	1475	1480
Val Glu Leu Asp Phe Leu Leu Arg Ser Pro Val Gln Thr Gly Thr Ala		1485
	1490	1495
Ser Pro Val Glu Phe Leu Ser His Gln Ala Trp Gly Ala Val Lys Val		1500
1505	1510	1515
Leu Ser Ser Met Glu Glu Phe Ser Asn Leu Asp Arg Asp Ile Glu Gly		1520
	1525	1530
Ser Ala Lys Ser Trp Lys Lys Phe Val Glu Ser Glu Cys Pro Glu Lys		1535
	1540	1545
Glu Lys Leu Pro Gln Glu Trp Lys Asn Lys Thr Ala Leu Gln Arg Leu		1550
	1555	1560
Cys Met Leu Arg Ala Met Arg Pro Asp Arg Met Thr Tyr Ala Leu Arg		1565
	1570	1575
Asp Phe Val Glu Glu Lys Leu Gly Ser Lys Tyr Val Val Gly Arg Ala		1580
1585	1590	1595
Leu Asp Phe Ala Thr Ser Phe Glu Glu Ser Gly Pro Ala Thr Pro Met		1600
	1605	1610
Phe Phe Ile Leu Ser Pro Gly Val Asp Pro Leu Lys Asp Val Glu Ser		1615
	1620	1625
Gln Gly Arg Lys Leu Gly Tyr Thr Phe Asn Asn Gln Asn Phe His Asn		1630
	1635	1640
Val Ser Leu Gly Gln Gly Gln Glu Val Val Ala Glu Ala Ala Leu Asp		1645
	1650	1655
Leu Ala Ala Lys Lys Gly His Trp Val Ile Leu Gln Asn Thr Leu Glu		1660
1665	1670	1675
Met Cys Ser Arg Glu Thr Glu Phe Lys Ser Ile Leu Phe Ala Leu Cys		1680
	1685	1690
Tyr Phe His Ala Val Val Ala Glu Arg Arg Lys Phe Gly Pro Gln Gly		1695
	1700	1705
Trp Asn Arg Ser Tyr Pro Phe Asn Thr Gly Asp Leu Thr Ile Ser Val		1710
	1715	1720
Asn Val Leu Tyr Asn Phe Leu Glu Ala Asn Ala Lys Val Pro Tyr Asp		1725
	1730	1735
Asp Leu Arg Tyr Leu Phe Gly Glu Ile Met Tyr Gly Gly His Ile Thr		1740
1745	1750	1755
Asp Asp Trp Asp Arg Arg Leu Cys Arg Thr Tyr Leu Gly Glu Phe Ile		1760

1765 1770 1775
 Arg Pro Glu Met Leu Glu Gly Glu Leu Ser Leu Ala Pro Gly Phe Pro
 1780 1785 1790
 Leu Pro Gly Asn Met Asp Tyr Asn Gly Tyr His Gln Tyr Ile Asp Ala
 1795 1800 1805
 Glu Leu Pro Pro Glu Ser Pro Tyr Leu Tyr Gly Leu His Pro Asn Ala
 1810 1815 1820
 Glu Ile Gly Phe Leu Thr Gln Thr Ser Glu Lys Leu Phe Arg Thr Val
 1825 1830 1835 1840
 Leu Glu Leu Gln Pro Arg Asp Ser Gln Ala Arg Asp Gly Ala Gly Ala
 1845 1850 1855
 Thr Arg Glu Glu Lys Val Lys Ala Leu Leu Glu Glu Ile Leu Glu Arg
 1860 1865 1870
 Val Thr Asp Glu Phe Asn Ile Pro Glu Leu Met Ala Lys Val Glu Glu
 1875 1880 1885
 Arg Thr Pro Tyr Ile Val Val Ala Phe Gln Glu Cys Gly Arg Met Asn
 1890 1895 1900
 Ile Leu Thr Arg Glu Ile Gln Arg Ser Leu Arg Glu Leu Glu Leu Gly
 1905 1910 1915 1920
 Leu Lys Gly Glu Leu Thr Met Thr Ser His Met Glu Asn Leu Gln Asn
 1925 1930 1935
 Ala Leu Tyr Phe Asp Met Val Pro Glu Ser Trp Ala Arg Arg Ala Tyr
 1940 1945 1950
 Pro Ser Thr Ala Gly Leu Ala Ala Trp Phe Pro Asp Leu Leu Asn Arg
 1955 1960 1965
 Ile Lys Glu Leu Glu Ala Trp Thr Gly Asp Phe Thr Met Pro Ser Thr
 1970 1975 1980
 Val Trp Leu Thr Gly Phe Phe Asn Pro Gln Ser Phe Leu Thr Ala Ile
 1985 1990 1995 2000
 Met Gln Ser Thr Ala Arg Lys Asn Glu Trp Pro Leu Asp Gln Met Ala
 2005 2010 2015
 Leu Gln Cys Asp Met Thr Lys Lys Asn Arg Glu Glu Phe Arg Ser Pro
 2020 2025 2030
 Pro Arg Glu Gly Ala Tyr Ile His Gly Leu Phe Met Glu Gly Ala Cys
 2035 2040 2045
 Trp Asp Thr Gln Ala Gly Ile Ile Thr Glu Ala Lys Leu Lys Asp Leu
 2050 2055 2060
 Thr Pro Pro Met Pro Val Met Phe Ile Lys Ala Ile Pro Ala Asp Arg
 2065 2070 2075 2080
 Gln Asp Cys Gly His Val Tyr Ser Cys Pro Val Thr Lys Thr Ser Gln
 2085 2090 2095
 Arg Asp Pro Thr Tyr Val Trp Thr Phe Asn Leu Lys Thr Lys Glu Asn
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 Pro Ser Lys Trp Val Leu Ala Gly Val Ala Leu Leu Leu Gln Ile
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<211> 981

<212> PRT

<213> Homo sapiens

<400> 3510

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 Leu Asn Glu Ser Glu Val Asn Arg Gly Asp Lys Tyr Ile Ala Lys Phe
 35 40 45
 Gln Gly Glu Asp Thr Val Val Ile Ala Ser Lys Pro Tyr Ala Phe Asp
 50 55 60
 Arg Val Phe Gln Ser Ser Thr Ser Gln Glu Gln Val Tyr Asn Asp Cys

65	70	75	80
Ala Lys Lys Ile Val	Lys Asp Val Leu Glu Gly Tyr Asn Gly Thr Ile		
	85	90	95
Phe Ala Tyr Gly Gln Thr Ser Ser	Gly Lys Thr His Thr Met Glu Gly		
	100	105	110
Lys Leu His Asp Pro Glu Gly Met	Gly Ile Ile Pro Arg Ile Val Gln		
	115	120	125
Asp Ile Phe Asn Tyr Ile Tyr Ser Met Asp Glu Asn Leu Glu Phe His			
	130	135	140
Ile Lys Val Ser Tyr Phe Glu Ile Tyr Leu Asp Lys Ile Arg Asp Leu			
	145	150	155
Leu Asp Val Ser Lys Thr Asn Leu Ser Val His Glu Asp Lys Asn Arg			
	165	170	175
Val Pro Tyr Val Lys Gly Cys Thr Glu Arg Phe Val Cys Ser Pro Asp			
	180	185	190
Glu Val Met Asp Thr Ile Asp Glu Gly Lys Ser Asn Arg His Val Ala			
	195	200	205
Val Thr Asn Met Asn Glu His Ser Ser Arg Ser His Ser Ile Phe Leu			
	210	215	220
Ile Asn Val Lys Gln Glu Asn Thr Gln Thr Glu Gln Lys Leu Ser Gly			
	225	230	235
Lys Leu Tyr Leu Val Asp Leu Ala Gly Ser Glu Lys Val Ser Lys Thr			
	245	250	255
Gly Ala Glu Gly Ala Val Leu Asp Glu Ala Lys Asn Ile Asn Lys Ser			
	260	265	270
Leu Ser Ala Leu Gly Asn Val Ile Ser Ala Leu Ala Glu Gly Ser Thr			
	275	280	285
Tyr Val Pro Tyr Arg Asp Ser Lys Met Thr Arg Ile Leu Gln Asp Ser			
	290	295	300
Leu Gly Gly Asn Cys Arg Thr Thr Ile Val Ile Cys Cys Ser Pro Ser			
	305	310	315
Ser Tyr Asn Glu Ser Glu Thr Lys Ser Thr Leu Leu Phe Gly Gln Arg			
	325	330	335
Ala Lys Thr Ile Lys Asn Thr Val Cys Val Asn Val Glu Leu Thr Ala			
	340	345	350
Glu Gln Trp Lys Lys Lys Tyr Glu Lys Glu Lys Glu Lys Asn Lys Ile			
	355	360	365
Leu Arg Asn Thr Ile Gln Trp Leu Glu Asn Glu Leu Asn Arg Trp Arg			
	370	375	380
Asn Gly Glu Thr Val Pro Ile Asp Glu Gln Phe Asp Lys Glu Lys Ala			
	385	390	395
Asn Leu Glu Ala Phe Thr Val Asp Lys Asp Ile Thr Leu Thr Asn Asp			
	405	410	415
Lys Pro Ala Thr Ala Ile Gly Val Ile Gly Asn Phe Thr Asp Ala Glu			
	420	425	430
Arg Arg Lys Cys Glu Glu Glu Ile Ala Lys Leu Tyr Lys Gln Leu Asp			
	435	440	445
Asp Lys Asp Glu Glu Ile Asn Gln Gln Ser Gln Leu Val Glu Lys Leu			
	450	455	460
Lys Thr Gln Met Leu Asp Gln Glu Glu Leu Leu Ala Ser Thr Arg Arg			
	465	470	475
Asp Gln Asp Asn Met Gln Ala Glu Leu Asn Arg Leu Gln Ala Glu Asn			
	485	490	495
Asp Ala Ser Lys Glu Glu Val Lys Glu Val Leu Gln Ala Leu Glu Glu			
	500	505	510
Leu Ala Val Asn Tyr Asp Gln Lys Ser Gln Glu Val Glu Asp Lys Thr			
	515	520	525
Lys Glu Tyr Glu Leu Leu Ser Asp Glu Leu Asn Gln Lys Ser Ala Thr			
	530	535	540
Leu Ala Ser Ile Asp Ala Glu Leu Gln Lys Leu Lys Glu Met Thr Asn			
	545	550	555
His Gln Lys Lys Arg Ala Ala Glu Met Met Ala Ser Leu Leu Lys Asp			
	565	570	575
Leu Ala Glu Ile Gly Ile Ala Val Gly Asn Asn Asp Val Lys Gln Pro			

580 585 590
 Glu Gly Thr Gly Met Ile Asp Glu Glu Phe Thr Val Ala Arg Leu Tyr
 595 600 605
 Ile Ser Lys Met Lys Ser Glu Val Lys Thr Met Val Lys Arg Cys Lys
 610 615 620
 Gln Leu Glu Ser Thr Gln Thr Glu Ser Asn Lys Lys Met Glu Glu Asn
 625 630 635 640
 Glu Lys Glu Leu Ala Ala Cys Gln Leu Arg Ile Ser Gln His Glu Ala
 645 650 655
 Lys Ile Lys Ser Leu Thr Glu Tyr Leu Gln Asn Val Glu Gln Lys Lys
 660 665 670
 Arg Gln Leu Glu Glu Ser Val Asp Ala Leu Ser Glu Glu Leu Val Gln
 675 680 685
 Leu Arg Ala Gln Glu Lys Val His Glu Met Glu Lys Glu His Leu Asn
 690 695 700
 Lys Val Gln Thr Ala Asn Glu Val Lys Gln Ala Val Glu Gln Gln Ile
 705 710 715 720
 Gln Ser His Arg Glu Thr His Gln Lys Gln Ile Ser Ser Leu Arg Asp
 725 730 735
 Glu Val Glu Ala Lys Ala Lys Leu Ile Thr Asp Leu Gln Asp Gln Asn
 740 745 750
 Gln Lys Met Met Leu Glu Gln Glu Arg Leu Arg Val Glu His Glu Lys
 755 760 765
 Leu Lys Ala Thr Asp Gln Glu Lys Ser Arg Lys Leu His Glu Leu Thr
 770 775 780
 Val Met Gln Asp Arg Arg Glu Gln Ala Arg Gln Asp Leu Lys Gly Leu
 785 790 795 800
 Glu Glu Thr Val Ala Lys Glu Leu Gln Thr Leu His Asn Leu Arg Lys
 805 810 815
 Leu Phe Val Gln Asp Leu Ala Thr Arg Val Lys Lys Ser Ala Glu Ile
 820 825 830
 Asp Ser Asp Asp Thr Gly Gly Ser Ala Ala Gln Lys Gln Lys Ile Ser
 835 840 845
 Phe Leu Glu Asn Asn Leu Glu Gln Leu Thr Lys Ser Ala Gln Thr Ser
 850 855 860
 Trp Tyr Arg Asp Asn Ala Asp Leu Arg Cys Glu Leu Pro Lys Leu Glu
 865 870 875 880
 Lys Arg Leu Arg Ala Thr Ala Glu Arg Val Lys Ala Leu Glu Ser Ala
 885 890 895
 Leu Lys Glu Ala Lys Glu Asn Ala Ser Arg Asp Arg Lys Arg Tyr Gln
 900 905 910
 Gln Glu Val Asp Arg Ile Lys Glu Ala Val Arg Ser Lys Asn Met Ala
 915 920 925
 Arg Arg Gly His Ser Ala Gln Ile Ala Lys Pro Ile Arg Pro Gly Gln
 930 935 940
 His Pro Ala Ala Ser Pro Thr His Pro Ser Ala Ile Arg Gly Gly Gly
 945 950 955 960
 Ala Phe Val Gln Asn Ser Gln Pro Val Ala Val Arg Gly Gly Gly Gly
 965 970 975
 Lys Gln Val
 979

<210> 3511
 <211> 587
 <212> PRT
 <213> Homo sapiens

<400> 3511
 Met Ala Ser Val Gln Ala Ser Arg Arg Gln Trp Cys Tyr Leu Cys Asp
 1 5 10 15
 Leu Pro Lys Met Pro Trp Ala Met Val Trp Asp Phe Ser Glu Ala Val

5253

530	535	540
Tyr Cys Pro Ser Gly Asp Lys Cys Pro Leu Val Gly Ser Ser Val Pro		
545	550	555
Trp Ala Phe Met Gln Gly Glu Ile Ala Thr Ile Leu Ala Gly Asp Ile		560
	565	570
Lys Val Lys Lys Glu Arg Asp Pro		575
	580	584

<210> 3512

<211> 664

<212> PRT

<213> Homo sapiens

<400> 3512

Asn Thr Asn Ser Ser Ser Val Thr Asn Ser Ala Ala Gly Val Glu Asp		
1	5	10
Leu Asn Ile Val Gln Val Thr Val Pro Asp Asn Glu Lys Glu Arg Leu		15
	20	25
Ser Ser Ile Glu Lys Ile Lys Gln Leu Arg Glu Gln Val Asn Asp Leu		30
	35	40
Phe Ser Arg Lys Phe Gly Glu Ala Ile Gly Val Asp Phe Pro Val Lys		45
	50	55
Val Pro Tyr Arg Lys Ile Thr Phe Asn Pro Gly Cys Val Val Ile Asp		60
	65	70
Gly Met Pro Pro Gly Val Val Phe Lys Ala Pro Gly Tyr Leu Glu Ile		75
	85	90
Ser Ser Met Arg Arg Ile Leu Glu Ala Ala Glu Phe Ile Lys Phe Thr		95
	100	105
Val Ile Arg Pro Leu Pro Gly Leu Glu Leu Ser Asn Gly Glu Tyr Ser		110
	115	120
Thr Val Gly Lys Arg Lys Ile Asp Gln Glu Gly Arg Val Phe Gln Glu		125
	130	135
Lys Trp Glu Arg Ala Tyr Phe Phe Val Glu Val Gln Asn Ile Ser Thr		140
	145	150
Cys Leu Ile Cys Lys Arg Ser Met Ser Val Ser Lys Glu Tyr Asn Leu		155
	165	170
Arg Arg His Tyr Gln Thr Asn His Ser Lys His Tyr Asp Gln Tyr Met		175
	180	185
Glu Arg Met Arg Asp Glu Lys Leu His Glu Leu Lys Lys Gly Leu Arg		190
	195	200
Lys Tyr Leu Leu Gly Leu Ser Asp Thr Glu Cys Pro Glu Gln Lys Gln		205
	210	215
Val Phe Ala Asn Pro Ser Pro Thr Gln Lys Ser Pro Val Gln Pro Val		220
	225	230
Glu Asp Leu Ala Gly Asn Leu Trp Glu Lys Leu Arg Glu Lys Ile Arg		235
	245	250
Ser Phe Val Ala Tyr Ser Ile Ala Ile Asp Glu Ile Thr Asp Ile Asn		255
	260	265
Asn Thr Thr Gln Leu Ala Ile Phe Ile Arg Gly Val Asp Glu Asn Phe		270
	275	280
Asp Val Ser Glu Glu Leu Leu Asp Thr Val Pro Met Thr Gly Thr Lys		285
	290	295
Ser Gly Asn Glu Ile Phe Ser Arg Val Glu Lys Ser Leu Lys Asn Phe		300
	305	310
Cys Ile Asn Trp Ser Lys Leu Val Ser Val Ala Ser Thr Gly Thr Pro		315
	325	330
Pro Met Val Asp Ala Asn Asn Gly Leu Val Thr Lys Leu Lys Ser Arg		335
	340	345
Val Ala Thr Phe Cys Lys Gly Ala Glu Leu Lys Ser Ile Cys Cys Ile		350
	355	360
Ile His Pro Glu Ser Leu Cys Ala Gln Lys Leu Lys Met Asp His Val		365

370	375	380
Met Asp Val Val Val Lys Ser Val Asn Trp Ile Cys Ser Arg Gly Leu		
385	390	395
Asn His Ser Glu Phe Thr Thr Leu Leu Tyr Glu Leu Asp Ser Gln Tyr		400
	405	410
Gly Ser Leu Leu Tyr Tyr Thr Glu Ile Lys Trp Leu Ser Arg Gly Leu		415
	420	425
Val Leu Lys Arg Phe Phe Glu Ser Leu Glu Glu Ile Asp Ser Phe Met		430
	435	440
Ser Ser Arg Gly Lys Pro Leu Pro Gln Leu Ser Ser Ile Asp Trp Ile		445
	450	455
Arg Asp Leu Ala Phe Leu Val Asp Met Thr Met His Leu Asn Ala Leu		460
465	470	475
Asn Ile Ser Leu Gln Gly His Ser Gln Ile Val Thr Gln Met Tyr Asp		480
	485	490
Leu Ile Arg Ala Phe Leu Ala Lys Leu Cys Leu Trp Glu Thr His Leu		495
	500	505
Thr Arg Asn Asn Leu Ala His Phe Pro Thr Leu Lys Leu Val Ser Arg		510
	515	520
Asn Glu Ser Asp Gly Leu Asn Tyr Ile Pro Lys Ile Ala Glu Leu Lys		525
	530	535
Thr Glu Phe Gln Lys Arg Leu Ser Asp Phe Lys Leu Tyr Glu Ser Glu		540
545	550	555
Leu Thr Leu Phe Ser Ser Pro Phe Ser Thr Lys Ile Asp Ser Val His		560
	565	570
Glu Glu Leu Gln Met Glu Val Ile Asp Leu Gln Cys Asn Thr Val Leu		575
	580	585
Lys Thr Lys Tyr Asp Lys Val Gly Ile Pro Glu Phe Tyr Lys Tyr Leu		590
	595	600
Trp Gly Ser Tyr Pro Lys Tyr Lys His His Cys Ala Lys Ile Leu Ser		605
	610	615
Met Phe Gly Ser Thr Tyr Ile Cys Glu Gln Leu Phe Ser Ile Met Lys		620
625	630	635
Leu Ser Lys Thr Lys Tyr Cys Ser Gln Leu Lys Asp Ser Gln Trp Asp		640
	645	650
Ser Val Leu His Ile Ala Thr		655
	660	663

<210> 3513

<211> 442

<212> PRT

<213> Homo sapiens

<400> 3513

Phe Lys Ser Leu Leu Ser Val Lys Trp Phe Cys Phe Ser Ile Leu Val	
1	5
Leu Ile Phe Leu Gly Thr Arg Cys Tyr Trp Glu Met Thr Gln Ser Arg	
	20
Pro Ser Pro Asp Pro His Arg Gly Arg Trp Glu Gly Gly Arg Ser Arg	
	35
Pro Lys Gly Gly Glu Glu Gly Arg Arg Arg Thr Arg Val Pro Gly Leu	
	50
Val Thr Ala Ser Gly Pro Gly Asn Pro Leu Pro Asp Arg Leu Gly Glu	
	65
Met Ala Gly Gly Arg His Arg Arg Val Val Gly Thr Leu His Leu Leu	
	85
Leu Leu Val Ala Leu Pro Trp Ala Ser Arg Gly Val Ser Pro Ser	
	100
Ala Ser Ala Trp Pro Glu Glu Lys Asn Tyr His Gln Pro Ala Ile Leu	
	115
Asn Ser Ser Ala Leu Arg Gln Ile Ala Glu Gly Thr Ser Ile Ser Glu	
	125

130	135	140
Met Trp Gln Asn Asp Leu Gln Pro Leu Leu Ile Glu Arg Tyr Pro Gly		
145	150	155
Ser Pro Gly Ser Tyr Ala Ala Arg Gln His Ile Met Gln Arg Ile Gln		160
	165	170
Arg Leu Gln Ala Asp Trp Val Leu Glu Ile Asp Thr Phe Leu Ser Gln		175
	180	185
Thr Pro Tyr Gly Tyr Arg Ser Phe Ser Asn Ile Ile Ser Thr Leu Asn		190
	195	200
Pro Thr Ala Lys Arg His Leu Val Leu Ala Cys His Tyr Asp Ser Lys		205
	210	215
Tyr Phe Ser His Trp Asn Asn Arg Val Phe Val Gly Ala Thr Asp Ser		220
225	230	235
Ala Val Pro Cys Ala Met Met Leu Glu Leu Ala Arg Ala Leu Asp Lys		240
	245	250
Lys Leu Leu Ser Leu Lys Thr Val Ser Asp Ser Lys Pro Asp Leu Ser		255
	260	265
Leu Gln Leu Ile Phe Phe Asp Gly Glu Glu Ala Phe Leu His Trp Ser		270
	275	280
Pro Gln Asp Ser Leu Tyr Gly Ser Arg His Leu Ala Ala Lys Met Ala		285
	290	295
Ser Thr Pro His Pro Pro Gly Ala Arg Gly Thr Ser Gln Leu His Gly		300
305	310	315
Met Asp Leu Leu Val Leu Leu Asp Leu Ile Gly Ala Pro Asn Pro Thr		320
	325	330
Phe Pro Asn Phe Phe Pro Asn Ser Ala Arg Trp Phe Glu Arg Leu Gln		335
	340	345
Ala Ile Glu His Glu Leu His Glu Leu Gly Leu Leu Lys Asp His Ser		350
	355	360
Leu Glu Gly Arg Tyr Phe Gln Asn Tyr Ser Tyr Gly Gly Val Ile Gln		365
	370	375
Asp Asp His Ile Pro Phe Leu Arg Arg Gly Val Pro Val Leu His Leu		380
385	390	395
Ile Pro Ser Pro Phe Pro Glu Val Trp His Thr Met Asp Asp Asn Glu		400
	405	410
Glu Asn Leu Asp Glu Ser Thr Ile Asp Asn Leu Asn Lys Ile Leu Gln		415
	420	425
Val Phe Val Leu Glu Tyr Leu His Leu		430
	435	440
		441

<210> 3514

<211> 442

<212> PRT

<213> Homo sapiens

<400> 3514

Phe Lys Ser Leu Leu Ser Val Lys Trp Phe Cys Phe Ser Ile Leu Val	
1	5
Leu Ile Phe Leu Gly Thr Arg Cys Tyr Trp Glu Met Thr Gln Ser Arg	10
	15
	20
Pro Ser Pro Asp Pro His Arg Gly Arg Trp Glu Gly Gly Arg Ser Arg	25
	30
	35
Pro Lys Gly Gly Glu Glu Gly Arg Arg Arg Thr Arg Val Pro Gly Leu	40
	45
	50
Val Thr Ala Ser Gly Pro Gly Asn Pro Leu Pro Asp Arg Leu Gly Glu	55
	60
	65
Met Ala Gly Gly Arg His Arg Arg Val Val Gly Thr Leu His Leu Leu	70
	75
	80
	85
Leu Leu Val Ala Leu Pro Trp Ala Ser Arg Gly Val Ser Pro Ser	90
	95
	100
Ala Ser Ala Trp Pro Glu Glu Lys Asn Tyr His Gln Pro Ala Ile Leu	105
	110

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      115      120      125
Asn Ser Ser Ala Leu Arg Gln Ile Ala Glu Gly Thr Ser Ile Ser Glu
  130      135      140
Met Trp Gln Asn Asp Leu Gln Pro Leu Leu Ile Glu Arg Tyr Pro Gly
145      150      155      160
Ser Pro Gly Ser Tyr Ala Ala Arg Gln His Ile Met Gln Arg Ile Gln
      165      170      175
Arg Leu Gln Ala Asp Trp Val Leu Glu Ile Asp Thr Phe Leu Ser Gln
      180      185      190
Thr Pro Tyr Gly Tyr Arg Ser Phe Ser Asn Ile Ile Ser Thr Leu Asn
  195      200      205
Pro Thr Ala Lys Arg His Leu Val Leu Ala Cys His Tyr Asp Ser Lys
  210      215      220
Tyr Phe Ser His Trp Asn Asn Arg Val Phe Val Gly Ala Thr Asp Ser
225      230      235      240
Ala Val Pro Cys Ala Met Met Leu Glu Leu Ala Arg Ala Leu Asp Lys
      245      250      255
Lys Leu Leu Ser Leu Lys Thr Val Ser Asp Ser Lys Pro Asp Leu Ser
  260      265      270
Leu Gln Leu Ile Phe Phe Asp Gly Glu Glu Ala Phe Leu His Trp Ser
  275      280      285
Pro Gln Asp Ser Leu Tyr Gly Ser Arg His Leu Ala Ala Lys Met Ala
  290      295      300
Ser Thr Pro His Pro Pro Gly Ala Arg Gly Thr Ser Gln Leu His Gly
305      310      315      320
Met Asp Leu Leu Val Leu Leu Asp Leu Ile Gly Ala Pro Asn Pro Thr
      325      330      335
Phe Pro Asn Phe Phe Pro Asn Ser Ala Arg Trp Phe Glu Arg Leu Gln
      340      345      350
Ala Ile Glu His Glu Leu His Glu Leu Gly Leu Leu Lys Asp His Ser
      355      360      365
Leu Glu Gly Arg Tyr Phe Gln Asn Tyr Ser Tyr Gly Gly Val Ile Gln
  370      375      380
Asp Asp His Ile Pro Phe Leu Arg Arg Gly Val Pro Val Leu His Leu
385      390      395      400
Ile Pro Ser Pro Phe Pro Glu Val Trp His Thr Met Asp Asp Asn Glu
      405      410      415
Glu Asn Leu Asp Glu Ser Thr Ile Asp Asn Leu Asn Lys Ile Leu Gln
      420      425      430
Val Phe Val Leu Glu Tyr Leu His Leu
      435      440 441

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<210> 3515

<211> 216

<212> PRT

<213> Homo sapiens

<400> 3515

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Leu Cys Arg Asp Leu Thr Thr Thr Met Ser Ser Lys Arg Thr Lys Thr
  1      5      10      15
Lys Thr Lys Lys Arg Pro Gln Arg Ala Thr Ser Asn Val Phe Ala Met
      20      25      30
Phe Asp Gln Ser Gln Ile Gln Glu Phe Lys Glu Ala Phe Asn Met Ile
      35      40      45
Asp Gln Asn Arg Asp Gly Phe Ile Asp Lys Glu Asp Leu His Asp Met
      50      55      60
Leu Ala Ser Leu Gly Lys Asn Pro Thr Asp Glu Tyr Leu Asp Ala Met
      65      70      75      80
Met Asn Glu Ala Pro Gly Pro Ile Asn Phe Thr Met Phe Leu Thr Met
      85      90      95
Phe Gly Glu Lys Leu Asn Gly Thr Asp Pro Glu Asp Val Ile Arg Asn

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<210> 3516
<211> 1727
<212> PRT
<213> Homo sapiens
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5258

305		310		315		320
Tyr Tyr Leu Glu Leu	Glu Ala Ser Gly Phe Pro Glu Asp Pro Leu Pro					
	325		330		335	
Cys Ala Val Thr Leu Ser Asn Ser Asn Leu Lys Phe Gly Ile Ile Pro						
	340		345		350	
Gln Glu Leu His Ser Arg Leu Leu Asp Gln Glu Asp Tyr Lys Asn Arg						
	355		360		365	
Thr Gln Ala Val Glu Glu Leu Lys Gln Val Leu Gly Lys Phe Asn Pro						
	370		375		380	
Ser Ser Thr Pro His Ser Ser Leu Val Gly Phe Ile Ser Leu Leu Tyr						
385		390		395		400
Asn Leu Leu Asp Asp Ser Asn Phe Lys Val Val His Gly Thr Leu Glu						
	405		410		415	
Val Leu His Leu Leu Val Ile Arg Leu Gly Glu Gln Val Gln Gln Phe						
	420		425		430	
Leu Gly Pro Val Ile Ala Ala Ser Val Lys Val Leu Ala Asp Asn Lys						
	435		440		445	
Leu Val Ile Lys Gln Glu Tyr Met Lys Ile Phe Leu Lys Leu Met Lys						
	450		455		460	
Glu Val Gly Pro Gln Gln Val Leu Cys Leu Leu Leu Glu His Leu Lys						
465		470		475		480
His Lys His Ser Arg Val Arg Glu Glu Val Val Asn Ile Cys Ile Cys						
	485		490		495	
Ser Leu Leu Thr Tyr Pro Ser Glu Asp Phe Asp Leu Pro Lys Leu Ser						
	500		505		510	
Phe Asp Leu Ala Pro Ala Leu Val Asp Ser Lys Arg Arg Val Arg Gln						
	515		520		525	
Ala Ala Leu Glu Ala Phe Ala Val Leu Ala Ser Ser Met Gly Ser Gly						
	530		535		540	
Lys Thr Ser Ile Leu Phe Lys Ala Val Asp Thr Val Glu Leu Gln Asp						
545		550		555		560
Asn Gly Asp Gly Val Met Asn Ala Val Gln Ala Arg Leu Ala Arg Lys						
	565		570		575	
Thr Leu Pro Arg Leu Thr Glu Gln Gly Phe Val Glu Tyr Ala Val Leu						
	580		585		590	
Met Pro Ser Ser Ala Gly Gly Arg Ser Asn His Leu Ala His Gly Ala						
	595		600		605	
Asp Thr Asp Trp Leu Leu Ala Gly Asn Arg Thr Gln Ser Ala His Cys						
	610		615		620	
His Cys Gly Asp His Val Arg Asp Ser Met His Ile Tyr Gly Ser Tyr						
625		630		635		640
Ser Pro Thr Ile Cys Thr Arg Arg Val Leu Ser Ala Gly Lys Gly Lys						
	645		650		655	
Asn Lys Leu Pro Trp Glu Asn Glu Gln Pro Gly Ile Met Gly Glu Asn						
	660		665		670	
Gln Thr Ser Thr Ser Lys Asp Ile Glu Gln Phe Ser Thr Tyr Asp Phe						
	675		680		685	
Ile Pro Ser Ala Lys Leu Lys Leu Ser Gln Gly Met Pro Val Asn Asp						
	690		695		700	
Asp Leu Cys Phe Ser Arg Lys Arg Val Ser Arg Asn Leu Phe Gln Asn						
705		710		715		720
Ser Arg Asp Phe Asn Pro Asp Cys Leu Pro Leu Cys Ala Ala Gly Thr						
	725		730		735	
Thr Gly Thr His Gln Thr Asn Leu Ser Gly Lys Cys Ala Gln Leu Gly						
	740		745		750	
Phe Ser Gln Ile Cys Gly Lys Thr Gly Ser Val Gly Ser Asp Leu Gln						
	755		760		765	
Phe Leu Gly Thr Thr Ser Ser His Gln Glu Lys Val Tyr Ala Ser Leu						
	770		775		780	
Asn Phe Gly Ser Lys Thr Gln Gln Thr Phe Gly Ser Gln Thr Glu Cys						
785		790		795		800
Thr Ser Ser Asn Gly Gln Asn Pro Ser Pro Gly Ala Tyr Ile Leu Pro						
	805		810		815	
Ser Tyr Pro Val Ser Ser Pro Arg Thr Ser Pro Lys His Thr Ser Pro						

5260

1330 1335 1340
 Leu Leu His Lys Ala Gly Glu Ser Asn Thr Phe Ile Arg Glu Asp Val
 1345 1350 1355 1360
 Asp Lys Ala Leu Arg Ala Met Val Asn Asn Val Thr Pro Ala Arg Ala
 1365 1370 1375
 Val Val Ser Leu Ile Asn Gly Gly Gln Arg Tyr Tyr Gly Arg Lys Met
 1380 1385 1390
 Leu Phe Phe Met Met Cys His Pro Asn Phe Glu Lys Met Leu Glu Lys
 1395 1400 1405
 Tyr Val Pro Ser Lys Asp Leu Pro Tyr Ile Lys Asp Ser Val Arg Asn
 1410 1415 1420
 Leu Gln Gln Lys Gly Leu Gly Glu Ile Pro Leu Asp Thr Pro Ser Ala
 1425 1430 1435 1440
 Lys Gly Arg Arg Ser His Thr Gly Ser Val Gly Asn Thr Arg Ser Ser
 1445 1450 1455
 Ser Val Ser Arg Asp Ala Phe Asn Ser Ala Glu Arg Ala Val Thr Glu
 1460 1465 1470
 Val Arg Glu Val Thr Arg Lys Ser Val Pro Arg Asn Ser Leu Glu Ser
 1475 1480 1485
 Ala Glu Tyr Leu Lys Leu Ile Thr Gly Leu Leu Asn Ala Lys Asp Phe
 1490 1495 1500
 Arg Asp Arg Ile Asn Gly Ile Lys Gln Leu Leu Ser Asp Thr Glu Asn
 1505 1510 1515 1520
 Asn Gln Asp Leu Val Val Gly Asn Ile Val Lys Ile Phe Asp Ala Phe
 1525 1530 1535
 Lys Ser Arg Leu His Asp Ser Asn Ser Lys Val Asn Leu Val Ala Leu
 1540 1545 1550
 Glu Thr Met His Lys Met Ile Pro Leu Leu Arg Asp His Leu Ser Pro
 1555 1560 1565
 Ile Ile Asn Met Leu Ile Pro Ala Ile Val Asp Asn Asn Leu Asn Ser
 1570 1575 1580
 Lys Asn Pro Gly Ile Tyr Ala Ala Ala Thr Asn Val Val Gln Ala Leu
 1585 1590 1595 1600
 Ser Gln His Val Asp Asn Tyr Leu Leu Gln Pro Phe Cys Thr Lys
 1605 1610 1615
 Ala Gln Phe Leu Asn Gly Lys Ala Lys Gln Asp Met Thr Glu Lys Leu
 1620 1625 1630
 Ala Asp Ile Val Thr Glu Leu Tyr Gln Arg Lys Pro His Ala Thr Glu
 1635 1640 1645
 Gln Lys Val Leu Val Val Leu Trp His Leu Leu Gly Asn Met Thr Asn
 1650 1655 1660
 Ser Gly Ser Leu Pro Gly Ala Gly Gly Asn Ile Arg Thr Ala Thr Ala
 1665 1670 1675 1680
 Lys Leu Ser Lys Ala Leu Phe Ala Gln Met Gly Gln Asn Leu Leu Asn
 1685 1690 1695
 Gln Ala Ala Ser Gln Pro Pro His Ile Lys Lys Ser Leu Glu Glu Leu
 1700 1705 1710
 Leu Asp Met Thr Ile Leu Asn Glu Leu
 1715 1720 1721

<210> 3517
 <211> 402
 <212> PRT
 <213> Homo sapiens

<400> 3517
 Gln Asp Leu Lys Pro Val Leu Asp Arg Glu Tyr Leu Ala Ile Tyr Leu
 1 5 10 15
 Lys Met Val Phe Thr Cys Asn Ala Cys Gly Glu Ser Val Lys Lys
 20 25 30
 Ile Gln Val Glu Lys His Val Ser Val Cys Arg Asn Cys Glu Cys Leu

35	40	45
Ser Cys Ile Asp Cys Gly Lys Asp Phe Trp Gly Asp Asp Tyr Lys Asn		
50	55	60
His Val Lys Cys Ile Ser Glu Asp Gln Lys Tyr Gly Gly Lys Gly Tyr		
65	70	75
Glu Lys Val Lys Thr His Lys Gly Asp Ala Ser Lys Gln Gln Ala Trp		
85	90	95
Ile Gln Lys Ile Ser Glu Leu Ile Lys Arg Pro Asn Val Ser Pro Lys		
100	105	110
Val Arg Glu Leu Leu Glu Gln Ile Ser Ala Phe Asp Asn Val Pro Gln		
115	120	125
Lys Lys Ala Lys Phe Gln Asn Trp Met Lys Asn Ser Leu Lys Val His		
130	135	140
Asn Glu Ser Ile Leu Asp Gln Val Trp Asn Ile Phe Ser Glu Ala Ser		
145	150	155
Asn Ser Glu Pro Val Asn Lys Glu Gln Asp Gln Arg Pro Leu His Pro		
165	170	175
Val Ala Asn Pro His Ala Glu Ile Ser Thr Lys Val Pro Ala Ser Lys		
180	185	190
Val Lys Asp Ala Val Glu Gln Gln Gly Glu Val Lys Lys Asn Lys Arg		
195	200	205
Glu Arg Lys Glu Glu Arg Gln Lys Lys Arg Lys Arg Glu Lys Lys Glu		
210	215	220
Leu Lys Leu Glu Asn His Gln Glu Asn Ser Arg Asn Gln Lys Pro Lys		
225	230	235
Lys Arg Lys Lys Gly Gln Glu Ala Asp Leu Glu Ala Gly Gly Glu Glu		
245	250	255
Val Pro Glu Ala Asn Gly Ser Ala Gly Lys Arg Ser Lys Lys Lys Lys		
260	265	270
Gln Arg Lys Asp Ser Ala Ser Glu Glu Glu Ala Arg Val Gly Ala Gly		
275	280	285
Lys Arg Lys Arg Arg His Ser Lys Val Glu Thr Asp Ser Lys Lys Lys		
290	295	300
Lys Met Lys Leu Pro Glu His Pro Glu Gly Gly Glu Pro Glu Asp Asp		
305	310	315
Glu Ala Pro Ala Lys Gly Lys Phe Asn Trp Lys Gly Thr Ile Lys Ala		
325	330	335
Ile Leu Lys Gln Ala Pro Asp Asn Glu Ile Thr Ile Lys Lys Leu Arg		
340	345	350
Lys Lys Val Leu Ala Gln Tyr Tyr Thr Val Thr Asp Glu His His Arg		
355	360	365
Ser Glu Glu Glu Leu Leu Val Ile Phe Asn Lys Lys Ile Ser Lys Asn		
370	375	380
Pro Thr Phe Lys Leu Leu Lys Asp Lys Val Lys Leu Val Lys		
385	390	395
		398

<210> 3518

<211> 211

<212> PRT

<213> Homo sapiens

<400> 3518

Ala Pro Asp Ser Asn Ala Arg Asn Asp His Phe Asp Ala Cys Ser Leu
1 5 10 15
Arg Val Gln Ala Gly Leu Ser Ser Ala Gly Pro Ala Leu Gly Asn Ser
20 25 30
Gly Leu Ala Ala Leu Met Ala Ser Pro Ser Lys Ala Val Ile Val Pro
35 40 45
Gly Asn Gly Gly Gly Asp Val Thr Thr His Gly Trp Tyr Gly Trp Val
50 55 60
Lys Lys Glu Leu Glu Lys Ile Pro Gly Phe Gln Cys Leu Ala Lys Asn

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65          70          75          80
Met Pro Asp Pro Ile Thr Ala Arg Glu Ser Ile Trp Leu Pro Phe Met
      85          90          95
Glu Thr Glu Leu His Cys Asp Glu Lys Thr Ile Ile Ile Gly His Ser
      100          105          110
Ser Gly Ala Ile Ala Ala Met Arg Tyr Ala Glu Thr His Arg Val Tyr
      115          120          125
Ala Ile Val Leu Val Ser Ala Tyr Thr Ser Asp Leu Gly Asp Glu Asn
      130          135          140
Glu Arg Ala Ser Gly Tyr Phe Thr Arg Pro Trp Gln Trp Glu Lys Ile
      145          150          155          160
Lys Ala Asn Cys Pro Tyr Ile Val Gln Phe Gly Ser Thr Asp Asp Pro
      165          170          175
Phe Leu Pro Trp Lys Glu Gln Gln Glu Val Ala Asp Ser Trp Lys Pro
      180          185          190
Asn Cys Thr Asn Ser Leu Thr Val Ala Thr Phe Arg Thr Gln Ser Phe
      195          200          205
Met Asn
      210

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<210> 3519
 <211> 733
 <212> PRT
 <213> Homo sapiens

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      <400> 3519
Val Arg Glu Thr Arg Arg Glu Met Ala Met Ala Met Ser Asp Ser Gly
  1          5          10          15
Ala Ser Arg Leu Arg Arg Gln Leu Glu Ser Gly Gly Phe Glu Ala Arg
      20          25          30
Leu Tyr Val Lys Gln Leu Ser Gln Gln Ser Asp Gly Asp Arg Asp Leu
      35          40          45
Gln Glu His Arg Gln Arg Ile Gln Ala Leu Ala Glu Glu Thr Ala Gln
      50          55          60
Asn Leu Lys Arg Asn Val Tyr Gln Asn Tyr Arg Gln Phe Ile Glu Thr
      65          70          75          80
Ala Arg Glu Ile Ser Tyr Leu Glu Ser Glu Met Tyr Gln Leu Ser His
      85          90          95
Leu Leu Thr Glu Gln Lys Ser Ser Leu Glu Ser Ile Pro Leu Thr Leu
      100          105          110
Leu Pro Ala Ala Ala Ala Ala Gly Ala Ala Ala Ala Ser Gly Gly Glu
      115          120          125
Glu Gly Val Gly Gly Ala Gly Gly Arg Asp His Leu Arg Gly Gln Ala
      130          135          140
Gly Phe Phe Ser Thr Pro Gly Gly Ala Ser Arg Asp Gly Ser Gly Pro
      145          150          155          160
Gly Glu Glu Gly Lys Gln Arg Thr Leu Thr Thr Leu Leu Glu Lys Val
      165          170          175
Glu Gly Cys Arg His Leu Leu Glu Thr Pro Gly Gln Tyr Leu Val Tyr
      180          185          190
Asn Gly Asp Leu Val Glu Tyr Asp Ala Asp His Met Ala Gln Leu Gln
      195          200          205
Arg Val His Gly Phe Leu Met Asn Asp Cys Leu Leu Val Ala Thr Trp
      210          215          220
Leu Pro Gln Arg Arg Gly Met Tyr Arg Tyr Asn Ala Leu Tyr Ser Leu
      225          230          235          240
Asp Gly Leu Ala Val Val Asn Val Lys Asp Asn Pro Pro Met Lys Asp
      245          250          255
Met Phe Lys Leu Leu Met Phe Pro Glu Asn Arg Ile Phe Gln Ala Glu
      260          265          270
Asn Ala Lys Ile Lys Arg Glu Trp Leu Glu Val Leu Glu Asp Thr Lys

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275	280	285
Arg Ala Leu Ser Glu Lys	Arg Arg Arg Glu Gln Glu	Glu Ala Ala Ala
290	295	300
Pro Arg Gly Pro Pro Gln	Val Thr Ser Lys Ala Thr	Asn Pro Phe Glu
305	310	315
Asp Asp Glu Glu Glu Glu	Pro Ala Val Pro Glu Val	Glu Glu Glu Lys
325	330	335
Val Asp Leu Ser Met Glu Trp	Ile Gln Glu Leu Pro Glu	Asp Leu Asp
340	345	350
Val Cys Ile Ala Gln Arg Asp	Phe Glu Gly Ala Val Asp	Leu Leu Asp
355	360	365
Lys Leu Asn His Tyr Leu Glu	Asp Lys Pro Ser Pro Pro	Val Lys
370	375	380
Glu Leu Arg Ala Lys Val Glu	Glu Arg Val Arg Gln Leu Thr	Glu Val
385	390	395
Leu Val Phe Glu Leu Ser Pro	Asp Arg Ser Leu Arg Gly Gly	Pro Lys
405	410	415
Ala Thr Arg Arg Ala Val Ser	Gln Leu Ile Arg Leu Gly Gln	Cys Thr
420	425	430
Lys Ala Cys Glu Leu Phe Leu	Arg Asn Arg Ala Ala Val	His Thr
435	440	445
Ala Ile Arg Gln Leu Arg Ile	Glu Gly Ala Thr Leu Leu Tyr	Ile His
450	455	460
Lys Leu Cys His Val Phe Phe	Thr Ser Leu Leu Glu Thr Ala	Arg Glu
465	470	475
Phe Glu Ile Asp Phe Ala Gly	Thr Asp Ser Gly Cys Tyr Ser	Ala Phe
485	490	495
Val Val Trp Ala Arg Ser Ala	Met Gly Met Phe Val Asp Ala	Phe Ser
500	505	510
Lys Gln Val Phe Asp Ser Lys	Glu Ser Leu Ser Thr Ala Ala	Glu Cys
515	520	525
Val Lys Val Ala Lys Glu His	Cys Gln Gln Leu Gly Asp Ile	Gly Leu
530	535	540
Asp Leu Thr Phe Ile Ile His	Ala Leu Leu Val Lys Asp Ile	Gln Gly
545	550	555
Ala Leu His Ser Tyr Lys Glu	Ile Ile Ile Glu Ala Thr Lys	His Arg
565	570	575
Asn Ser Glu Glu Met Trp Arg	Arg Met Asn Leu Met Thr Pro	Glu Ala
580	585	590
Leu Gly Lys Leu Lys Glu Glu	Met Lys Ser Cys Gly Val Ser	Asn Phe
595	600	605
Glu Gln Tyr Thr Gly Asp Asp	Cys Trp Val Asn Leu Ser Tyr	Thr Val
610	615	620
Val Ala Phe Thr Lys Gln Thr	Met Gly Phe Leu Glu Glu Ala	Leu Lys
625	630	635
Leu Tyr Phe Pro Glu Leu His	Met Val Leu Leu Glu Ser Leu	Val Glu
645	650	655
Ile Ile Leu Val Ala Val Gln	His Val Asp Tyr Ser Leu Arg	Cys Glu
660	665	670
Gln Asp Pro Glu Lys Lys Ala	Phe Ile Arg Gln Asn Ala Ser	Phe Leu
675	680	685
Tyr Glu Thr Val Leu Pro Val	Val Glu Lys Arg Phe Glu Glu	Gly Val
690	695	700
Gly Lys Pro Ala Lys Gln Leu	Gln Asp Leu Arg Asn Ala Ser	Arg Leu
705	710	715
Ile Arg Val Asn Pro Glu Ser	Thr Thr Ser Val Val	
725	730	732

<210> 3520

<211> 393

<212> PRT

<213> Homo sapiens

<400> 3520
 Phe Val Ala His Leu Ala Trp Pro Trp Arg Ala Asp Gly Asp Met Glu
 1 5 10 15
 Asp Gly Val Leu Asn Glu Gly Phe Leu Val Lys Arg Gly His Ile Val
 20 25 30
 His Asn Trp Lys Ala Arg Trp Phe Ile Leu Arg Gln Asn Thr Leu Val
 35 40 45
 Tyr Tyr Lys Leu Glu Gly Gly Arg Arg Val Thr Pro Pro Lys Gly Arg
 50 55 60
 Ile Leu Leu Asp Gly Cys Thr Ile Thr Cys Pro Cys Leu Glu Tyr Glu
 65 70 75 80
 Asn Arg Pro Leu Leu Ile Lys Leu Lys Thr Gln Thr Ser Thr Glu Tyr
 85 90 95
 Phe Leu Glu Ala Cys Ser Arg Glu Glu Arg Arg Asp Ala Trp Ala Phe
 100 105 110
 Glu Ile Thr Gly Ala Ile His Ala Gly Gln Ala Arg Gly Lys Val Gln
 115 120 125
 Gln Leu His Ser Leu Arg Asn Ser Phe Lys Leu Pro Pro His Ile Ser
 130 135 140
 Leu His Arg Ile Val Asp Lys Met His Asp Ser Asn Thr Gly Ile Arg
 145 150 155 160
 Ser Ser Pro Asn Met Glu Gln Gly Ser Thr Tyr Lys Lys Thr Phe Leu
 165 170 175
 Gly Ser Ser Leu Val Asp Trp Leu Ile Ser Asn Ser Phe Thr Ala Ser
 180 185 190
 Arg Leu Glu Ala Val Thr Leu Ala Ser Met Leu Met Glu Glu Asn Phe
 195 200 205
 Leu Arg Pro Val Gly Val Arg Ser Met Gly Ala Ile Arg Ser Gly Asp
 210 215 220
 Leu Ala Glu Gln Phe Leu Asp Asp Ser Thr Ala Leu Tyr Thr Phe Ala
 225 230 235 240
 Glu Ser Tyr Lys Lys Lys Ile Ser Pro Lys Glu Glu Ile Ser Leu Ser
 245 250 255
 Thr Val Glu Leu Ser Gly Thr Val Val Lys Gln Gly Tyr Leu Ala Lys
 260 265 270
 Gln Gly His Lys Arg Lys Asn Trp Lys Val Arg Arg Phe Val Leu Arg
 275 280 285
 Lys Asp Pro Ala Phe Leu His Tyr Tyr Asp Pro Ser Lys Glu Glu Asn
 290 295 300
 Arg Pro Val Gly Gly Phe Ser Leu Arg Gly Ser Leu Val Ser Ala Leu
 305 310 315 320
 Glu Asp Asn Gly Val Pro Thr Gly Val Lys Gly Asn Val Gln Gly Asn
 325 330 335
 Leu Phe Lys Val Ile Thr Lys Asp Asp Thr His Tyr Tyr Ile Gln Ala
 340 345 350
 Ser Ser Lys Ala Glu Arg Ala Glu Trp Ile Gly Ser Leu Ser Lys Ser
 355 360 365
 Leu Asn Met Asn Lys Asp Pro Glu Gly Thr Pro Asp Ser Leu Pro Ser
 370 375 380
 Leu Pro Arg
 385 387

<210> 3521

<211> 1021

<212> PRT

<213> Homo sapiens

<400> 3521

His Ala Ser Val Ser Leu Ser Leu Gly Cys Pro Arg Pro Cys Ala Asp

1	5	10	15
Thr Pro Gly Pro Gln Pro Gln Pro Met Asp Leu Arg Val Gly Gln Arg			
20	25	30	
Pro Pro Val Glu Pro Pro Pro Glu Pro Thr Leu Leu Ala Leu Gln Arg			
35	40	45	
Pro Gln Arg Leu His His His Leu Phe Leu Ala Gly Leu Gln Gln Gln			
50	55	60	
Arg Ser Val Glu Pro Met Arg Val Lys Met Glu Leu Pro Ala Cys Gly			
65	70	75	80
Ala Thr Leu Ser Leu Val Pro Ser Leu Pro Ala Phe Ser Ile Pro Arg			
85	90	95	
His Gln Ser Gln Ser Ser Thr Pro Cys Pro Phe Leu Gly Cys Arg Pro			
100	105	110	
Cys Pro Gln Leu Ser Met Asp Thr Pro Met Pro Glu Leu Gln Glu Ala			
115	120	125	
Pro Gln Glu Gln Glu Leu Arg Gln Leu Leu His Lys Asp Lys Ser Lys			
130	135	140	
Arg Ser Ala Val Ala Ser Ser Val Val Lys Gln Lys Leu Ala Glu Val			
145	150	155	160
Ile Leu Lys Lys Gln Gln Ala Ala Leu Glu Arg Thr Val His Pro Asn			
165	170	175	
Ser Pro Gly Ile Pro Tyr Arg Thr Leu Glu Pro Leu Glu Thr Glu Gly			
180	185	190	
Ala Thr Arg Ser Met Leu Ser Ser Phe Leu Pro Pro Val Pro Ser Leu			
195	200	205	
Pro Ser Asp Pro Pro Glu His Phe Pro Leu Arg Lys Thr Val Ser Glu			
210	215	220	
Pro Asn Leu Lys Leu Arg Tyr Lys Pro Lys Lys Ser Leu Glu Arg Arg			
225	230	235	240
Lys Asn Pro Leu Leu Arg Lys Glu Ser Ala Pro Pro Ser Leu Arg Arg			
245	250	255	
Arg Pro Ala Glu Thr Leu Gly Asp Ser Ser Pro Ser Ser Ser Ser Thr			
260	265	270	
Pro Ala Ser Gly Cys Ser Ser Pro Asn Asp Ser Glu His Gly Pro Asn			
275	280	285	
Pro Ile Leu Gly Ser Glu Ala Leu Leu Gly Gln Arg Leu Arg Leu Gln			
290	295	300	
Glu Thr Ser Val Ala Pro Phe Ala Leu Pro Thr Val Ser Leu Leu Pro			
305	310	315	320
Ala Ile Thr Leu Gly Leu Pro Ala Pro Ala Arg Ala Asp Ser Asp Arg			
325	330	335	
Arg Thr His Pro Thr Leu Gly Pro Arg Gly Pro Ile Leu Gly Ser Pro			
340	345	350	
His Thr Pro Leu Phe Leu Pro His Gly Leu Glu Pro Glu Ala Gly Gly			
355	360	365	
Thr Leu Pro Ser Arg Leu Gln Pro Ile Leu Leu Leu Asp Pro Ser Gly			
370	375	380	
Ser His Ala Pro Leu Leu Thr Val Pro Gly Leu Gly Pro Leu Pro Phe			
385	390	395	400
His Phe Ala Gln Ser Leu Met Thr Thr Glu Arg Leu Ser Gly Ser Gly			
405	410	415	
Leu His Trp Pro Leu Ser Arg Thr Arg Ser Glu Pro Leu Pro Pro Ser			
420	425	430	
Ala Thr Ala Pro Pro Pro Pro Gly Pro Met Gln Pro Arg Leu Glu Gln			
435	440	445	
Leu Lys Thr His Val Gln Val Ile Lys Arg Ser Ala Lys Pro Ser Glu			
450	455	460	
Lys Pro Arg Leu Arg Gln Ile Pro Ser Ala Glu Asp Leu Glu Thr Asp			
465	470	475	480
Gly Gly Gly Pro Gly Gln Val Val Asp Asp Gly Leu Glu His Arg Glu			
485	490	495	
Leu Gly His Gly Gln Pro Glu Ala Arg Gly Pro Ala Pro Leu Gln Gln			
500	505	510	
His Pro Gln Val Leu Leu Trp Glu Gln Gln Arg Leu Ala Gly Arg Leu			

515	520	525
Pro Arg Gly Ser Thr Gly Asp Thr Val Leu Leu Pro Leu Ala Gln Gly		
530	535	540
Gly His Arg Pro Leu Ser Arg Ala Gln Ser Ser Pro Ala Ala Pro Ala		
545	550	555
Ser Leu Ser Ala Pro Glu Pro Ala Ser Gln Ala Arg Val Leu Ser Ser		
565	570	575
Ser Glu Thr Pro Ala Arg Thr Leu Pro Phe Thr Thr Gly Leu Ile Tyr		
580	585	590
Asp Ser Val Met Leu Lys His Gln Cys Ser Cys Gly Asp Asn Ser Arg		
595	600	605
His Pro Glu His Ala Gly Arg Ile Gln Ser Ile Trp Ser Arg Leu Gln		
610	615	620
Glu Arg Gly Leu Arg Ser Gln Cys Glu Cys Leu Arg Gly Arg Lys Ala		
625	630	635
Ser Leu Glu Glu Leu Gln Ser Val His Ser Glu Arg His Val Leu Leu		
645	650	655
Tyr Gly Thr Asn Pro Leu Ser Arg Leu Lys Leu Asp Asn Gly Lys Leu		
660	665	670
Ala Gly Leu Leu Ala Gln Arg Met Phe Val Met Leu Pro Cys Gly Gly		
675	680	685
Val Gly Val Asp Thr Asp Thr Ile Trp Asn Glu Leu His Ser Ser Asn		
690	695	700
Ala Ala Arg Trp Ala Ala Gly Ser Val Thr Asp Leu Ala Phe Lys Val		
705	710	715
Ala Ser Arg Glu Leu Lys Asn Gly Phe Ala Val Val Arg Pro Pro Gly		
725	730	735
His His Ala Asp His Ser Thr Ala Met Gly Phe Cys Phe Phe Asn Ser		
740	745	750
Val Ala Ile Ala Cys Arg Gln Leu Gln Gln Gln Ser Lys Ala Ser Lys		
755	760	765
Ile Leu Ile Val Asp Trp Asp Val His His Gly Asn Gly Thr Gln Gln		
770	775	780
Thr Phe Tyr Gln Asp Pro Ser Val Leu Tyr Ile Ser Leu His Arg His		
785	790	795
Asp Asp Gly Asn Phe Phe Pro Gly Ser Gly Ala Val Asp Glu Val Gly		
805	810	815
Ala Gly Ser Gly Glu Gly Phe Asn Val Asn Val Ala Trp Ala Gly Gly		
820	825	830
Leu Asp Pro Pro Met Gly Asp Pro Glu Tyr Leu Ala Ala Phe Arg Ile		
835	840	845
Val Val Met Pro Ile Ala Arg Glu Phe Ser Pro Asp Leu Val Leu Val		
850	855	860
Ser Ala Gly Phe Asp Ala Ala Glu Gly His Pro Ala Pro Leu Gly Gly		
865	870	875
Tyr His Val Ser Ala Lys Cys Phe Gly Tyr Met Thr Gln Gln Leu Met		
885	890	895
Asn Leu Ala Gly Gly Ala Val Val Leu Ala Leu Glu Gly Gly His Asp		
900	905	910
Leu Thr Ala Ile Cys Asp Ala Ser Glu Ala Cys Val Ala Ala Leu Leu		
915	920	925
Gly Asn Arg Val Asp Pro Leu Ser Glu Glu Gly Trp Lys Gln Lys Pro		
930	935	940
Asn Leu Asn Ala Ile Arg Ser Leu Glu Ala Val Ile Arg Val His Ser		
945	950	955
Lys Tyr Trp Gly Cys Met Gln Arg Leu Ala Ser Cys Pro Asp Ser Trp		
965	970	975
Val Pro Arg Val Pro Gly Ala Asp Lys Glu Glu Val Glu Ala Val Thr		
980	985	990
Ala Leu Ala Ser Leu Ser Val Gly Ile Leu Ala Glu Asp Arg Pro Ser		
995	1000	1005
Glu Gln Leu Val Glu Glu Glu Pro Met Asn Leu		
1010	1015	1020

<210> 3522
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 3522
 Lys Met Ala Ala Leu Gly Glu Pro Val Arg Leu Glu Arg Asp Ile Cys
 1 5 10 15
 Arg Ala Ile Glu Leu Leu Glu Lys Leu Gln Arg Ser Gly Glu Val Pro
 20 25 30
 Pro Gln Lys Leu Gln Ala Leu Gln Arg Val Leu Gln Ser Glu Phe Cys
 35 40 45
 Asn Ala Val Arg Glu Val Tyr Glu His Val Tyr Glu Thr Val Asp Ile
 50 55 60
 Ser Ser Ser Pro Glu Val Arg Ala Asn Ala Thr Ala Lys Ala Thr Val
 65 70 75 80
 Ala Ala Phe Ala Ala Ser Glu Gly His Ser His Pro Arg Val Val Glu
 85 90 95
 Leu Pro Lys Thr Glu Glu Gly Leu Gly Phe Asn Ile Met Gly Gly Lys
 100 105 110
 Glu Gln Asn Ser Pro Ile Tyr Ile Ser Arg Ile Ile Pro Gly Gly Ile
 115 120 125
 Ala Asp Arg His Gly Gly Leu Lys Arg Gly Asp Gln Leu Leu Ser Val
 130 135 140
 Asn Gly Val Ser Val Glu Gly Glu His His Glu Lys Ala Val Glu Leu
 145 150 155 160
 Leu Lys Ala Ala Gln Gly Lys Val Lys Leu Val Val Arg Tyr Thr Pro
 165 170 175
 Lys Val Leu Glu Glu Met Glu Ser Arg Phe Glu Lys Met Arg Ser Ala
 180 185 190
 Lys Arg Arg Gln Gln Thr
 195 198

<210> 3523
 <211> 274
 <212> PRT
 <213> Homo sapiens

<400> 3523
 Ile Met Ala Glu Thr Ser Leu Leu Glu Ala Gly Ala Ser Ala Ala Ser
 1 5 10 15
 Thr Ala Ala Ala Leu Glu Asn Leu Gln Val Glu Ala Ser Cys Ser Val
 20 25 30
 Cys Leu Glu Tyr Leu Lys Glu Pro Val Ile Ile Glu Cys Gly His Asn
 35 40 45
 Phe Cys Lys Ala Cys Ile Thr Arg Trp Trp Glu Asp Leu Glu Arg Asp
 50 55 60
 Phe Pro Cys Pro Val Cys Arg Lys Thr Ser Arg Tyr Arg Ser Leu Arg
 65 70 75 80
 Pro Asn Arg Gln Leu Gly Ser Met Val Glu Ile Ala Lys Gln Leu Arg
 85 90 95
 Pro Ser Ser Gly Arg Ser Gly Met Arg Ala Ser Ala Pro Gln His His
 100 105 110
 Glu Ala Leu Ser Leu Phe Cys Tyr Glu Asp Gln Glu Ala Val Cys Leu
 115 120 125
 Ile Cys Ala Ile Ser His Thr His Arg Ala His Thr Val Val Pro Leu
 130 135 140
 Asp Asp Ala Thr Gln Glu Tyr Lys Glu Lys Leu Gln Lys Cys Leu Glu

145		150		155		160									
Ala	Leu	Asn	Gln	Lys	Leu	Gln	Glu	Ile	Thr	Arg	Cys	Lys	Ser	Ser	Glu
				165					170						175
Glu	Lys	Lys	Pro	Gly	Glu	Leu	Lys	Arg	Leu	Val	Glu	Ser	Arg	Arg	Gln
			180						185					190	
Gln	Ile	Leu	Arg	Glu	Phe	Glu	Glu	Leu	His	Arg	Arg	Leu	Asp	Glu	Glu
		195					200					205			
Gln	Gln	Val	Leu	Leu	Ser	Arg	Leu	Glu	Glu	Glu	Glu	Gln	Asp	Ile	Leu
	210					215					220				
Gln	Arg	Leu	Arg	Glu	Asn	Ala	Ala	His	Leu	Gly	Asp	Lys	Arg	Arg	Asp
225					230					235					240
Leu	Ala	His	Leu	Ala	Ala	Glu	Val	Glu	Gly	Lys	Cys	Leu	Gln	Ser	Gly
				245					250					255	
Phe	Glu	Met	Leu	Lys	Val	Arg	Pro	Leu	Pro	Leu	His	Ser	Pro	Ser	Gly
			260					265					270		272

<210> 3524
 <211> 233
 <212> PRT
 <213> Homo sapiens

<400> 3524

Pro	Met	Val	Arg	His	Glu	Ala	Gly	Glu	Ala	Leu	Gly	Ala	Ile	Gly	Asp
1				5					10					15	
Pro	Glu	Val	Leu	Glu	Ile	Leu	Lys	Gln	Tyr	Ser	Ser	Asp	Pro	Val	Ile
		20						25					30		
Glu	Val	Ala	Glu	Thr	Cys	Gln	Leu	Ala	Val	Arg	Arg	Leu	Glu	Trp	Leu
		35				40						45			
Gln	Gln	His	Gly	Gly	Glu	Pro	Ala	Ala	Gly	Pro	Tyr	Leu	Ser	Val	Asp
	50					55				60					
Pro	Ala	Pro	Pro	Ala	Glu	Glu	Arg	Asp	Val	Gly	Arg	Leu	Arg	Glu	Ala
	65				70					75				80	
Leu	Leu	Asp	Glu	Ser	Arg	Pro	Leu	Phe	Glu	Arg	Tyr	Arg	Ala	Met	Phe
				85					90					95	
Ala	Leu	Arg	Asn	Ala	Gly	Gly	Glu	Glu	Ala	Ala	Leu	Ala	Leu	Ala	Glu
		100						105					110		
Gly	Leu	His	Cys	Gly	Ser	Ala	Leu	Phe	Arg	His	Glu	Val	Gly	Tyr	Val
		115				120						125			
Leu	Gly	Gln	Leu	Gln	His	Glu	Ala	Ala	Val	Pro	Gln	Leu	Ala	Ala	Ala
	130					135					140				
Leu	Ala	Arg	Cys	Thr	Glu	Asn	Pro	Met	Val	Arg	His	Glu	Cys	Ala	Glu
145					150					155					160
Ala	Leu	Gly	Ala	Ile	Ala	Arg	Pro	Ala	Cys	Leu	Ala	Ala	Leu	Gln	Ala
				165					170					175	
His	Ala	Asp	Asp	Pro	Glu	Arg	Val	Val	Arg	Glu	Ser	Cys	Lys	Val	Ala
		180						185					190		
Leu	Asp	Met	Tyr	Glu	His	Glu	Thr	Gly	Arg	Ala	Phe	Gln	Tyr	Ala	Asp
		195					200					205			
Gly	Leu	Glu	Gln	Leu	Arg	Gly	Ala	Pro	Ser	Leu	Gly	Pro	Asn	Pro	His
	210					215					220				
Pro	Glu	Leu	Pro	Glu	Asp	Ser									
225					230	231									

<210> 3525
 <211> 253
 <212> PRT
 <213> Homo sapiens

<400> 3525
 Glu Gly Leu Gln Arg Pro Glu Tyr Leu Val Ala Ser Ala Ala Gly Phe
 1 5 10 15
 Gln Gly Leu Ala Trp Gly Gly Glu Gly Arg Gly Arg Ala Gly Cys Ser
 20 25 30
 Ser Ser Gly Phe Arg Asp Ala Glu Pro Leu Leu Leu Ser Cys Pro Gly
 35 40 45
 Arg Asn Glu Pro Leu Lys Lys Glu Arg Leu Lys Trp Lys Ser Asp Tyr
 50 55 60
 Pro Met Thr Asp Gly Gln Leu Arg Ser Lys Arg Asp Glu Phe Trp Asp
 65 70 75 80
 Thr Ala Pro Ala Phe Glu Gly Arg Lys Glu Ile Trp Asp Ala Leu Lys
 85 90 95
 Ala Ala Ala Tyr Ala Ala Glu Ala Asn Asp His Glu Leu Ala Gln Ala
 100 105 110
 Ile Leu Asp Gly Ala Ser Ile Thr Leu Pro His Gly Thr Leu Cys Glu
 115 120 125
 Cys Tyr Asp Glu Leu Gly Asn Arg Tyr Gln Leu Pro Ile Tyr Cys Leu
 130 135 140
 Ser Pro Pro Val Asn Leu Leu Leu Glu His Thr Glu Glu Glu Ser Leu
 145 150 155 160
 Glu Pro Pro Glu Pro Pro Pro Ser Val Arg Arg Glu Phe Pro Leu Lys
 165 170 175
 Val Arg Leu Ser Thr Gly Lys Asp Val Arg Leu Ser Ala Ser Leu Pro
 180 185 190
 Asp Thr Val Gly Gln Leu Lys Arg Gln Leu His Ala Gln Glu Gly Thr
 195 200 205
 Pro Lys Pro Ser Trp Gln Arg Trp Phe Phe Ser Gly Lys Leu Leu Thr
 210 215 220
 Asp Arg Thr Arg Leu Gln Glu Thr Lys Ile Gln Lys Asp Phe Val Ile
 225 230 235 240
 Gln Val Ile Ile Asn Gln Pro Pro Pro Pro Gln Asp
 245 250 252

<210> 3526
 <211> 1107
 <212> PRT
 <213> Homo sapiens

<400> 3526
 Pro Gly Asn Glu Gly Leu Gly Leu Ala Ala Asp His Asn Glu Asp Leu
 1 5 10 15
 Gly His Leu Ser Ala Asp Ala Pro Trp Pro Ala Val Thr Met Ala Pro
 20 25 30
 Arg Lys Arg Ser His His Gly Leu Gly Phe Leu Cys Cys Phe Gly Gly
 35 40 45
 Ser Asp Ile Pro Glu Ile Asn Leu Arg Asp Asn His Pro Leu Gln Phe
 50 55 60
 Met Glu Phe Ser Ser Pro Ile Pro Asn Ala Glu Glu Leu Asn Ile Arg
 65 70 75 80
 Phe Ala Glu Leu Val Asp Glu Leu Asp Leu Thr Asp Lys Asn Arg Glu
 85 90 95
 Ala Met Phe Ala Leu Pro Pro Glu Lys Lys Trp Gln Ile Tyr Cys Ser
 100 105 110
 Lys Lys Lys Glu Gln Glu Asp Pro Asn Lys Leu Ala Thr Ser Trp Pro
 115 120 125
 Asp Tyr Tyr Ile Asp Arg Ile Asn Ser Met Ala Ala Met Gln Ser Leu
 130 135 140
 Tyr Ala Phe Asp Glu Glu Glu Thr Glu Met Arg Asn Gln Val Val Glu

145		150		155		160									
Asp	Leu	Lys	Thr	Ala	Leu	Arg	Thr	Gln	Pro	Met	Arg	Phe	Val	Thr	Arg
				165					170					175	
Phe	Ile	Glu	Leu	Glu	Gly	Leu	Thr	Cys	Leu	Leu	Asn	Phe	Leu	Arg	Ser
				180				185						190	
Met	Asp	His	Ala	Thr	Cys	Glu	Ser	Arg	Ile	His	Thr	Ser	Leu	Ile	Gly
		195					200					205			
Cys	Ile	Ile	Ala	Leu	Met	Asn	Asn	Ser	Gln	Gly	Arg	Ala	His	Val	Leu
	210					215					220				
Ala	Gln	Pro	Glu	Ala	Ile	Ser	Thr	Ile	Ala	Gln	Ser	Leu	Arg	Thr	Glu
225					230					235				240	
Asn	Ser	Lys	Thr	Lys	Val	Ala	Val	Leu	Glu	Ile	Leu	Gly	Ala	Val	Cys
			245						250					255	
Leu	Val	Pro	Gly	Gly	His	Lys	Lys	Val	Leu	Gln	Ala	Met	Leu	His	Tyr
		260						265						270	
Gln	Val	Tyr	Ala	Ala	Glu	Arg	Thr	Arg	Phe	Gln	Thr	Leu	Leu	Asn	Glu
	275						280					285			
Leu	Asp	Arg	Ser	Leu	Gly	Arg	Tyr	Arg	Asp	Glu	Val	Asn	Leu	Lys	Thr
	290					295					300				
Ala	Ile	Met	Ser	Phe	Ile	Asn	Ala	Val	Leu	Asn	Ala	Gly	Ala	Gly	Glu
305					310					315				320	
Asp	Asn	Leu	Glu	Phe	Arg	Leu	His	Leu	Arg	Tyr	Glu	Phe	Leu	Met	Leu
			325					330						335	
Gly	Ile	Gln	Pro	Val	Ile	Asp	Lys	Leu	Arg	Gln	His	Glu	Asn	Ala	Ile
		340						345						350	
Leu	Asp	Lys	His	Leu	Asp	Phe	Phe	Glu	Met	Val	Arg	Asn	Glu	Asp	Asp
	355					360						365			
Leu	Glu	Leu	Ala	Arg	Arg	Phe	Asp	Met	Val	His	Ile	Asp	Thr	Lys	Ser
	370					375					380				
Ala	Ser	Gln	Met	Phe	Glu	Leu	Ile	His	Lys	Lys	Leu	Lys	Tyr	Thr	Glu
385					390					395				400	
Ala	Tyr	Pro	Cys	Leu	Leu	Ser	Val	Leu	His	His	Cys	Leu	Gln	Met	Pro
			405						410					415	
Tyr	Lys	Arg	Asn	Gly	Gly	Tyr	Phe	Gln	Gln	Trp	Gln	Leu	Leu	Asp	Arg
		420						425						430	
Ile	Leu	Gln	Gln	Ile	Val	Leu	Gln	Asp	Glu	Arg	Gly	Val	Asp	Pro	Asp
	435						440					445			
Leu	Ala	Pro	Leu	Glu	Asn	Phe	Asn	Val	Lys	Asn	Ile	Val	Asn	Met	Leu
	450					455					460				
Ile	Asn	Glu	Asn	Glu	Val	Lys	Gln	Trp	Arg	Asp	Gln	Ala	Glu	Lys	Phe
465					470					475				480	
Arg	Lys	Glu	His	Met	Glu	Leu	Val	Ser	Arg	Leu	Glu	Arg	Lys	Glu	Arg
			485					490						495	
Glu	Cys	Glu	Thr	Lys	Thr	Leu	Glu	Lys	Glu	Glu	Met	Met	Arg	Thr	Leu
		500						505					510		
Asn	Lys	Met	Lys	Asp	Lys	Leu	Ala	Arg	Glu	Ser	Gln	Glu	Leu	Arg	Gln
	515						520					525			
Ala	Arg	Gly	Gln	Val	Ala	Glu	Leu	Val	Ala	Gln	Leu	Ser	Glu	Leu	Ser
	530					535					540				
Thr	Gly	Pro	Val	Ser	Ser	Pro	Pro	Pro	Pro	Gly	Gly	Pro	Leu	Thr	Leu
545					550					555				560	
Ser	Ser	Ser	Met	Thr	Thr	Asn	Asp	Leu	Pro	Pro	Pro	Pro	Pro	Pro	Leu
			565					570						575	
Pro	Phe	Ala	Cys	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Leu	Pro	Pro	Gly
			580					585						590	
Gly	Pro	Pro	Thr	Pro	Pro	Gly	Ala	Pro	Pro	Cys	Leu	Gly	Met	Gly	Leu
	595					600						605			
Pro	Leu	Pro	Gln	Asp	Pro	Tyr	Pro	Ser	Ser	Asp	Val	Pro	Leu	Arg	Lys
	610					615					620				
Lys	Arg	Val	Pro	Gln	Pro	Ser	His	Pro	Leu	Lys	Ser	Phe	Asn	Trp	Val
625					630					635				640	
Lys	Leu	Asn	Glu	Glu	Arg	Val	Pro	Gly	Thr	Val	Trp	Asn	Glu	Ile	Asp
			645					650						655	
Asp	Met	Gln	Val	Phe	Arg	Ile	Leu	Asp	Leu	Glu	Asp	Phe	Glu	Lys	Met

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        660              665              670
Phe Ser Ala Tyr Gln Arg His Gln Glu Leu Ile Thr Asn Pro Ser Gln
        675              680              685
Gln Lys Glu Leu Gly Ser Thr Glu Asp Ile Tyr Leu Ala Ser Arg Lys
        690              695              700
Val Lys Glu Leu Ser Val Ile Asp Gly Arg Arg Ala Gln Asn Cys Ile
705              710              715              720
Ile Leu Leu Ser Lys Leu Lys Leu Ser Asn Glu Glu Ile Arg Gln Ala
        725              730              735
Ile Leu Lys Met Asp Glu Gln Glu Asp Leu Ala Lys Asp Met Leu Glu
        740              745              750
Gln Leu Leu Lys Phe Ile Pro Glu Lys Ser Asp Ile Asp Leu Leu Glu
        755              760              765
Glu His Lys His Glu Ile Glu Arg Met Ala Arg Ala Asp Arg Phe Leu
        770              775              780
Tyr Glu Met Ser Arg Ile Asp His Tyr Gln Gln Arg Leu Gln Ala Leu
785              790              795              800
Phe Phe Lys Lys Lys Phe Gln Glu Arg Leu Ala Glu Ala Lys Pro Lys
        805              810              815
Val Glu Ala Ile Leu Leu Ala Ser Arg Glu Leu Val Arg Ser Lys Arg
        820              825              830
Leu Arg Gln Met Leu Glu Val Ile Leu Ala Ile Gly Asn Phe Met Asn
        835              840              845
Lys Gly Gln Arg Gly Gly Ala Tyr Gly Phe Arg Val Ala Ser Leu Asn
        850              855              860
Lys Ile Ala Asp Thr Lys Ser Ser Ile Asp Arg Asn Ile Ser Leu Leu
865              870              875              880
His Tyr Leu Ile Met Ile Leu Glu Lys His Phe Pro Asp Ile Leu Asn
        885              890              895
Met Pro Ser Glu Leu Gln His Leu Pro Glu Ala Ala Lys Val Asn Leu
        900              905              910
Ala Glu Leu Glu Lys Glu Val Gly Asn Leu Arg Arg Gly Leu Arg Ala
        915              920              925
Val Glu Val Glu Leu Glu Tyr Gln Arg Arg Gln Val Arg Glu Pro Ser
        930              935              940
Asp Lys Phe Val Pro Val Met Ser Asp Phe Ile Thr Val Ser Ser Phe
945              950              955              960
Ser Phe Ser Glu Leu Glu Asp Gln Leu Asn Glu Ala Arg Asp Lys Phe
        965              970              975
Ala Lys Ala Leu Met His Phe Gly Glu His Asp Ser Lys Met Gln Pro
        980              985              990
Asp Glu Phe Phe Gly Ile Phe Asp Thr Phe Leu Gln Ala Phe Ser Glu
        995              1000              1005
Ala Arg Gln Asp Leu Glu Ala Met Arg Arg Arg Lys Glu Glu Glu Glu
        1010              1015              1020
Arg Arg Ala Arg Met Glu Ala Met Leu Lys Glu Gln Arg Glu Arg Glu
1025              1030              1035              1040
Arg Trp Gln Arg Gln Arg Lys Val Leu Ala Ala Gly Ser Ser Leu Glu
        1045              1050              1055
Glu Gly Gly Glu Phe Asp Asp Leu Val Ser Ala Leu Arg Ser Gly Glu
        1060              1065              1070
Val Phe Asp Lys Asp Leu Cys Lys Leu Lys Arg Ser Arg Lys Arg Ser
        1075              1080              1085
Gly Ser Gln Ala Leu Glu Val Thr Arg Glu Arg Ala Ile Asn Arg Leu
        1090              1095              1100
Asn Tyr
11051106

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<210> 3527
<211> 246
<212> PRT
<213> Homo sapiens

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<400> 3527

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Leu Leu Gly Thr Arg Met Leu Ala Gly Gln Leu Glu Ala Arg Asp Pro
 1           5           10           15
Lys Glu Gly Thr His Pro Glu Asp Pro Cys Pro Gly Ala Gly Ala Val
          20           25           30
Met Glu Lys Thr Ala Val Ala Ala Glu Val Leu Thr Glu Asp Cys Asn
          35           40           45
Thr Gly Glu Met Pro Pro Leu Gln Gln Gln Ile Ile Arg Leu His Gln
          50           55           60
Glu Leu Gly Arg Gln Lys Ser Leu Trp Ala Asp Val His Gly Lys Leu
65           70           75           80
Arg Ser His Ile Asp Ala Leu Arg Glu Gln Asn Met Glu Leu Arg Glu
          85           90           95
Lys Leu Arg Ala Leu Gln Leu Gln Arg Trp Lys Ala Arg Lys Lys Ser
          100          105          110
Ala Ala Ser Pro His Ala Gly Gln Glu Ser His Thr Leu Ala Leu Glu
          115          120          125
Pro Ala Phe Gly Lys Ile Ser Pro Leu Ser Ala Asp Glu Glu Thr Ile
          130          135          140
Pro Lys Tyr Ala Gly His Lys Asn Gln Ser Gly His Ser Ser Trp Gly
145           150           155           160
Gln Arg Ser Ser Ser Asn Asn Ser Ala Pro Pro Lys Pro Met Ser Leu
          165          170          175
Lys Ile Glu Arg Ile Ser Ser Trp Lys Thr Pro Pro Gln Glu Asn Arg
          180          185          190
Asp Lys Asn Leu Ser Arg Arg Arg Gln Asp Arg Arg Ala Thr Pro Thr
          195          200          205
Gly Arg Pro Thr Pro Cys Ala Glu Arg Arg Gly Val Ser Glu Asp Gly
          210          215          220
Lys Val Ala Ser Asp Thr Cys Val Thr Leu His Trp Pro Leu Gly Lys
225           230           235           240
Phe Arg Phe Arg
          244

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<210> 3528

<211> 432

<212> PRT

<213> Homo sapiens

<400> 3528

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Arg Ile Ser Lys Ile Gln Val Tyr Tyr Ser Thr Gly Tyr Ser Ser Arg
 1           5           10           15
Lys Met Asn Pro Thr Leu Gly Leu Ala Ile Phe Leu Ala Val Leu Leu
          20           25           30
Thr Val Lys Gly Leu Leu Lys Pro Ser Phe Ser Pro Arg Asn Tyr Lys
          35           40           45
Ala Leu Ser Glu Val Gln Gly Trp Lys Gln Arg Met Ala Ala Lys Glu
          50           55           60
Leu Ala Arg Gln Asn Met Asp Leu Gly Phe Lys Leu Leu Lys Lys Leu
65           70           75           80
Ala Phe Tyr Asn Pro Gly Arg Asn Ile Phe Leu Ser Pro Leu Ser Ile
          85           90           95
Ser Thr Ala Phe Ser Met Leu Cys Leu Gly Ala Gln Asp Ser Thr Leu
          100          105          110
Asp Glu Ile Lys Gln Gly Phe Asn Phe Arg Lys Met Pro Glu Lys Asp
          115          120          125
Leu His Glu Gly Phe His Tyr Ile Ile His Glu Leu Thr Gln Lys Thr
          130          135          140
Gln Asp Leu Lys Leu Ser Ile Gly Asn Thr Leu Phe Ile Asp Gln Arg

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145 150 155 160
 Leu Gln Pro Gln Arg Lys Phe Leu Glu Asp Ala Lys Asn Phe Tyr Ser
 165 170 175
 Ala Glu Thr Ile Leu Thr Asn Phe Gln Asn Leu Glu Met Ala Gln Lys
 180 185 190
 Gln Ile Asn Asp Phe Ile Glu Ser Lys Thr His Gly Lys Ile Asn Asn
 195 200 205
 Leu Ile Glu Asn Ile Asp Pro Gly Thr Val Met Leu Leu Ala Asn Tyr
 210 215 220
 Ile Phe Phe Arg Ala Arg Trp Lys His Glu Phe Asp Pro Asn Val Thr
 225 230 235 240
 Lys Glu Glu Asp Phe Phe Leu Glu Lys Asn Ser Ser Val Lys Val Pro
 245 250 255
 Met Met Phe Arg Ser Gly Ile Tyr Gln Val Gly Tyr Asp Asp Lys Leu
 260 265 270
 Ser Cys Thr Ile Leu Glu Ile Pro Tyr Gln Lys Asn Ile Thr Ala Ile
 275 280 285
 Phe Ile Leu Pro Asp Glu Gly Lys Leu Lys His Leu Glu Lys Gly Leu
 290 295 300
 Gln Val Asp Thr Phe Ser Arg Trp Lys Thr Leu Leu Ser Arg Arg Val
 305 310 315 320
 Val Asp Val Ser Val Pro Arg Leu His Met Thr Gly Thr Phe Asp Leu
 325 330 335
 Lys Lys Thr Leu Ser Tyr Ile Gly Val Ser Lys Ile Phe Glu Glu His
 340 345 350
 Gly Asp Leu Thr Lys Ile Ala Pro His Arg Ser Leu Lys Val Gly Glu
 355 360 365
 Ala Val Asn Lys Ala Glu Leu Lys Met Asp Glu Arg Gly Thr Glu Gly
 370 375 380
 Ala Ala Gly Thr Gly Ala Gln Thr Leu Pro Met Glu Thr Pro Leu Val
 385 390 395 400
 Val Lys Ile Asp Lys Pro Tyr Leu Leu Leu Ile Tyr Ser Glu Lys Ile
 405 410 415
 Pro Ser Val Leu Phe Leu Gly Lys Ile Val Asn Pro Ile Gly Lys
 420 425 430 431

<210> 3529

<211> 1897

<212> PRT

<213> Homo sapiens

<400> 3529

Val Ser Ser Val Ser His Glu Asn Pro Thr Glu Val Phe Glu Asp Gly
 1 5 10 15
 Glu Asn Pro Pro Ser Ser Arg Ser Ser Glu Ser Gly Phe Thr Glu Phe
 20 25 30
 Ile Gln Tyr Gln Ala Asp Arg Thr Asp Asp Ile Asp Arg Glu Leu Ser
 35 40 45
 Glu Gly Gln Gly Ala Ala Ala Ile Pro Ile Gly Ser Thr Ser Ser Glu
 50 55 60
 Thr Glu Thr Ala Ser Thr Val Gly Ser Glu Glu Thr Ile Ile Gln Thr
 65 70 75 80
 Pro Ser Val Val Thr Gln Gly Thr Ala Thr Arg Ser Arg Lys Thr Ala
 85 90 95
 Gln Lys Thr Ala Met Gln Cys Cys Leu Glu Tyr Val Gln Gln Phe Leu
 100 105 110
 Thr Arg Leu Ile Asn Leu Tyr Ile Ile Gln Asn Asn Ser Phe Ser Gln
 115 120 125
 Ser Leu Ala Thr Glu His Gln Gly Asp Leu Gly Arg Glu Gln Gly Glu
 130 135 140
 Thr Ser Lys Trp Asp Arg Asn Ser Gln Gly Asp Val Lys Glu Lys Asn

145		150		155		160
Ile Ser Lys Gln	Lys Thr Ser Lys Glu Tyr Leu Ser Ala Phe Leu Ala					
	165		170			175
Ala Cys Gln Leu Phe	Leu Glu Cys Ser Ser Phe Pro Val Tyr Ile Ala					
	180		185			190
Glu Gly Asn His Thr	Ser Glu Leu Arg Ser Glu Lys Leu Glu Thr Asp					
	195	200		205		
Cys Glu His Val Gln	Pro Pro Gln Trp Leu Gln Thr Leu Met Asn Ala					
	210	215		220		
Cys Ser Gln Ala Ser	Asp Phe Ser Val Gln Ser Val Ala Ile Ser Leu					
	225	230		235		240
Val Met Asp Leu Val	Gly Leu Thr Gln Ser Val Ala Met Val Thr Gly					
	245		250			255
Glu Asn Ile Asn Ser	Val Glu Pro Ala Gln Pro Leu Ser Pro Asn Gln					
	260	265		270		
Gly Arg Val Ala Val	Val Ile Arg Pro Pro Leu Thr Gln Gly Asn Leu					
	275	280		285		
Arg Tyr Ile Ala Glu	Lys Thr Glu Phe Phe Lys His Val Ala Leu Thr					
	290	295		300		
Leu Trp Asp Gln Leu	Gly Asp Gly Thr Pro Gln His His Gln Lys Ser					
	305	310		315		320
Val Glu Leu Phe Tyr	Gln Leu His Asn Leu Val Pro Ser Ser Ser Ile					
	325	330		335		340
Cys Glu Asp Val Ile	Ser Gln Gln Leu Thr His Lys Asp Lys Lys Ile					
	340	345		350		
Arg Met Glu Ala His	Ala Lys Phe Ala Val Leu Trp His Leu Thr Arg					
	355	360		365		
Asp Leu His Ile Asn	Lys Ser Ser Ser Phe Val Arg Ser Phe Asp Arg					
	370	375		380		
Ser Leu Phe Ile Met	Leu Asp Ser Leu Asn Ser Leu Asp Gly Ser Thr					
	385	390		395		400
Ser Ser Val Gly Gln	Ala Trp Leu Asn Gln Val Leu Gln Arg His Asp					
	405	410		415		
Ile Ala Arg Val Leu	Glu Pro Leu Leu Leu Leu Leu His Pro Lys					
	420	425		430		
Thr Gln Arg Val Ser	Val Gln Arg Val Gln Ala Glu Arg Tyr Trp Asn					
	435	440		445		
Lys Ser Pro Cys Tyr	Pro Gly Glu Glu Ser Asp Lys His Phe Met Gln					
	450	455		460		
Asn Phe Ala Cys Ser	Asn Val Ser Gln Val Gln Leu Ile Thr Ser Lys					
	465	470		475		480
Gly Asn Gly Glu Lys	Pro Leu Thr Met Asp Glu Ile Glu Asn Phe Ser					
	485	490		495		
Leu Thr Val Asn Pro	Leu Ser Asp Arg Leu Ser Leu Leu Ser Thr Ser					
	500	505		510		
Ser Glu Thr Ile Pro	Met Val Val Ser Asp Phe Asp Leu Pro Asp Gln					
	515	520		525		
Gln Ile Glu Ile Leu	Gln Ser Ser Asp Ser Gly Cys Ser Gln Ser Ser					
	530	535		540		
Ala Gly Asp Asn Leu	Ser Tyr Glu Val Asp Pro Glu Thr Val Asn Ala					
	545	550		555		560
Gln Glu Asp Ser Gln	Met Pro Lys Glu Ser Ser Pro Asp Asp Asp Val					
	565	570		575		
Gln Gln Val Val Phe	Asp Leu Ile Cys Lys Val Val Ser Gly Leu Glu					
	580	585		590		
Val Glu Ser Ala Ser	Val Thr Ser Gln Leu Glu Ile Glu Ala Met Pro					
	595	600		605		
Pro Lys Cys Ser Asp	Ile Asp Pro Asp Glu Glu Thr Ile Lys Ile Glu					
	610	615		620		
Asp Asp Ser Ile Gln	Gln Ser Gln Asn Ala Leu Leu Ser Asn Glu Ser					
	625	630		635		640
Ser Gln Phe Leu Ser	Val Ser Ala Glu Gly His Glu Cys Val Ala					
	645	650		655		
Asn Gly Ile Ser Arg	Asn Ser Ser Ser Pro Cys Ile Ser Gly Thr Thr					

5276

1170	1175	1180
Arg Ser Gly Ile Leu Ser Ile Leu His Met Ile Met Ser Ser Val Thr		
1185	1190	1195
Leu Leu Trp Ser Ile Leu His Gln Ala Asp Ser Ser Glu Lys Met Thr		1200
	1205	1210
Ile Ala Ala Ser Ala Ser Leu Thr Thr Ile Asn Leu Gly Ala Thr Lys		1215
	1220	1225
Asn Leu Arg Gln Gln Ile Leu Glu Leu Leu Gly Pro Ile Ser Met Asn		1230
	1235	1240
His Gly Val His Phe Met Ala Ala Ile Ala Phe Val Trp Asn Glu Arg		1245
	1250	1255
Arg Gln Asn Lys Thr Thr Arg Thr Lys Val Ile Pro Ala Ala Ser		1260
1265	1270	1275
Glu Glu Gln Leu Leu Leu Val Glu Leu Val Arg Ser Ile Ser Val Met		1280
	1285	1290
Arg Ala Glu Thr Val Ile Gln Thr Val Lys Glu Val Leu Lys Gln Pro		1295
	1300	1305
Pro Ala Ile Ala Lys Asp Lys Lys His Leu Ser Leu Glu Val Cys Met		1310
	1315	1320
Leu Gln Phe Phe Tyr Ala Tyr Ile Gln Arg Ile Pro Val Pro Asn Leu		1325
1330	1335	1340
Val Asp Ser Trp Ala Ser Leu Leu Ile Leu Leu Lys Asp Ser Ile Gln		
1345	1350	1355
Leu Ser Leu Pro Ala Pro Gly Gln Phe Leu Ile Leu Gly Val Leu Asn		1360
	1365	1370
Glu Phe Ile Met Lys Asn Pro Ser Leu Glu Asn Lys Lys Asp Gln Arg		1375
	1380	1385
Asp Leu Gln Asp Val Thr His Lys Ile Val Asp Ala Ile Gly Ala Ile		1390
	1395	1400
Ala Gly Ser Ser Leu Glu Gln Thr Thr Trp Leu Arg Arg Asn Leu Glu		1405
	1410	1415
Val Lys Pro Ser Pro Lys Ile Met Val Asp Gly Thr Asn Leu Glu Ser		1420
1425	1430	1435
Asp Val Glu Asp Met Leu Ser Pro Ala Met Glu Thr Ala Asn Ile Thr		1440
	1445	1450
Pro Ser Val Tyr Ser Val His Ala Leu Thr Leu Leu Ser Glu Val Leu		1455
	1460	1465
Ala His Leu Leu Asp Met Val Phe Tyr Ser Asp Glu Lys Glu Arg Val		1470
	1475	1480
Ile Pro Leu Leu Val Asn Ile Met His Tyr Val Val Pro Tyr Leu Arg		1485
	1490	1495
Asn His Ser Ala His Asn Ala Pro Ser Tyr Arg Ala Cys Val Gln Leu		1500
1505	1510	1515
Leu Ser Ser Leu Ser Gly Tyr Gln Tyr Thr Arg Arg Ala Trp Lys Lys		1520
	1525	1530
Glu Ala Phe Asp Leu Phe Met Asp Pro Ser Phe Phe Gln Met Asp Ala		1535
	1540	1545
Ser Cys Val Asn His Trp Arg Ala Ile Met Asp Asn Leu Met Thr His		1550
	1555	1560
Asp Lys Thr Thr Phe Arg Asp Leu Met Thr Arg Val Ala Val Ala Gln		1565
	1570	1575
Ser Ser Ser Leu Asn Leu Phe Ala Asn Arg Asp Val Glu Leu Glu Gln		1580
1585	1590	1595
Arg Ala Met Leu Leu Lys Arg Leu Ala Phe Ala Ile Phe Ser Ser Glu		1600
	1605	1610
Ile Asp Gln Tyr Gln Lys Tyr Leu Pro Asp Ile Gln Glu Arg Leu Val		1615
	1620	1625
Glu Ser Leu Arg Leu Pro Gln Val Pro Thr Leu His Ser Gln Val Phe		1630
	1635	1640
Leu Phe Phe Arg Val Leu Leu Leu Arg Met Ser Pro Gln His Leu Thr		1645
	1650	1655
Ser Leu Trp Pro Thr Met Ile Thr Glu Leu Val Gln Val Phe Leu Leu		1660
1665	1670	1675
Met Glu Gln Glu Leu Thr Ala Asp Glu Asp Ile Ser Arg Thr Ser Gly		1680

1685 1690 1695
 Pro Ser Val Ala Gly Leu Glu Thr Thr Tyr Thr Gly Gly Asn Gly Phe
 1700 1705 1710
 Ser Thr Ser Tyr Asn Ser Gln Arg Trp Leu Asn Leu Tyr Leu Ser Ala
 1715 1720 1725
 Cys Lys Phe Leu Asp Leu Ala Leu Ala Leu Pro Ser Glu Asn Leu Pro
 1730 1735 1740
 Gln Phe Gln Met Tyr Arg Trp Ala Phe Ile Pro Glu Ala Ser Asp Asp
 1745 1750 1755 1760
 Ser Gly Leu Glu Val Arg Arg Gln Gly Ile His Gln Arg Glu Phe Lys
 1765 1770 1775
 Pro Tyr Val Val Arg Leu Ala Lys Leu Leu Arg Lys Arg Ala Lys Lys
 1780 1785 1790
 Asn Pro Glu Glu Asp Asn Ser Gly Arg Thr Leu Gly Trp Glu Pro Gly
 1795 1800 1805
 His Leu Leu Leu Thr Ile Cys Thr Val Arg Ser Met Glu Gln Leu Leu
 1810 1815 1820
 Pro Phe Phe Asn Val Leu Ser Gln Val Phe Asn Ser Lys Val Thr Ser
 1825 1830 1835 1840
 Arg Cys Gly Gly His Ser Gly Ser Pro Ile Leu Tyr Ser Asn Ala Phe
 1845 1850 1855
 Pro Asn Lys Asp Met Lys Leu Glu Asn His Lys Pro Cys Ser Ser Lys
 1860 1865 1870
 Ala Arg Gln Lys Ile Glu Glu Met Val Glu Lys Asp Phe Leu Glu Gly
 1875 1880 1885
 Met Ile Lys Thr
 1890 1892

<210> 3530
 <211> 1897
 <212> PRT
 <213> Homo sapiens

<400> 3530
 Val Ser Ser Val Ser His Glu Asn Pro Thr Glu Val Phe Glu Asp Gly
 1 5 10 15
 Glu Asn Pro Pro Ser Ser Arg Ser Ser Glu Ser Gly Phe Thr Glu Phe
 20 25 30
 Ile Gln Tyr Gln Ala Asp Arg Thr Asp Asp Ile Asp Arg Glu Leu Ser
 35 40 45
 Glu Gly Gln Gly Ala Ala Ala Ile Pro Ile Gly Ser Thr Ser Ser Glu
 50 55 60
 Thr Glu Thr Ala Ser Thr Val Gly Ser Glu Glu Thr Ile Ile Gln Thr
 65 70 75 80
 Pro Ser Val Val Thr Gln Gly Thr Ala Thr Arg Ser Arg Lys Thr Ala
 85 90 95
 Gln Lys Thr Ala Met Gln Cys Cys Leu Glu Tyr Val Gln Gln Phe Leu
 100 105 110
 Thr Arg Leu Ile Asn Leu Tyr Ile Ile Gln Asn Asn Ser Phe Ser Gln
 115 120 125
 Ser Leu Ala Thr Glu His Gln Gly Asp Leu Gly Arg Glu Gln Gly Glu
 130 135 140
 Thr Ser Lys Trp Asp Arg Asn Ser Gln Gly Asp Val Lys Glu Lys Asn
 145 150 155 160
 Ile Ser Lys Gln Lys Thr Ser Lys Glu Tyr Leu Ser Ala Phe Leu Ala
 165 170 175
 Ala Cys Gln Leu Phe Leu Glu Cys Ser Ser Phe Pro Val Tyr Ile Ala
 180 185 190
 Glu Gly Asn His Thr Ser Glu Leu Arg Ser Glu Lys Leu Glu Thr Asp
 195 200 205
 Cys Glu His Val Gln Pro Pro Gln Trp Leu Gln Thr Leu Met Asn Ala

210	215	220
Cys Ser Gln Ala Ser Asp Phe Ser Val Gln Ser Val Ala Ile Ser Leu		
225	230	235
Val Met Asp Leu Val Gly Leu Thr Gln Ser Val Ala Met Val Thr Gly		240
	245	250
Glu Asn Ile Asn Ser Val Glu Pro Ala Gln Pro Leu Ser Pro Asn Gln		255
	260	265
Gly Arg Val Ala Val Val Ile Arg Pro Pro Leu Thr Gln Gly Asn Leu		270
	275	280
Arg Tyr Ile Ala Glu Lys Thr Glu Phe Phe Lys His Val Ala Leu Thr		285
	290	295
Leu Trp Asp Gln Leu Gly Asp Gly Thr Pro Gln His His Gln Lys Ser		300
305	310	315
Val Glu Leu Phe Tyr Gln Leu His Asn Leu Val Pro Ser Ser Ser Ile		320
	325	330
Cys Glu Asp Val Ile Ser Gln Gln Leu Thr His Lys Asp Lys Lys Ile		335
	340	345
Arg Met Glu Ala His Ala Lys Phe Ala Val Leu Trp His Leu Thr Arg		350
	355	360
Asp Leu His Ile Asn Lys Ser Ser Ser Phe Val Arg Ser Phe Asp Arg		365
	370	375
Ser Leu Phe Ile Met Leu Asp Ser Leu Asn Ser Leu Asp Gly Ser Thr		380
385	390	395
Ser Ser Val Gly Gln Ala Trp Leu Asn Gln Val Leu Gln Arg His Asp		400
	405	410
Ile Ala Arg Val Leu Glu Pro Leu Leu Leu Leu Leu His Pro Lys		415
	420	425
Thr Gln Arg Val Ser Val Gln Arg Val Gln Ala Glu Arg Tyr Trp Asn		430
	435	440
Lys Ser Pro Cys Tyr Pro Gly Glu Glu Ser Asp Lys His Phe Met Gln		445
	450	455
Asn Phe Ala Cys Ser Asn Val Ser Gln Val Gln Leu Ile Thr Ser Lys		460
465	470	475
Gly Asn Gly Glu Lys Pro Leu Thr Met Asp Glu Ile Glu Asn Phe Ser		480
	485	490
Leu Thr Val Asn Pro Leu Ser Asp Arg Leu Ser Leu Leu Ser Thr Ser		495
	500	505
Ser Glu Thr Ile Pro Met Val Val Ser Asp Phe Asp Leu Pro Asp Gln		510
	515	520
Gln Ile Glu Ile Leu Gln Ser Ser Asp Ser Gly Cys Ser Gln Ser Ser		525
	530	535
Ala Gly Asp Asn Leu Ser Tyr Glu Val Asp Pro Glu Thr Val Asn Ala		540
545	550	555
Gln Glu Asp Ser Gln Met Pro Lys Glu Ser Ser Pro Asp Asp Asp Val		560
	565	570
Gln Gln Val Val Phe Asp Leu Ile Cys Lys Val Val Ser Gly Leu Glu		575
	580	585
Val Glu Ser Ala Ser Val Thr Ser Gln Leu Glu Ile Glu Ala Met Pro		590
	595	600
Pro Lys Cys Ser Asp Ile Asp Pro Asp Glu Glu Thr Ile Lys Ile Glu		605
	610	615
Asp Asp Ser Ile Gln Gln Ser Gln Asn Ala Leu Leu Ser Asn Glu Ser		620
625	630	635
Ser Gln Phe Leu Ser Val Ser Ala Glu Gly Gly His Glu Cys Val Ala		640
	645	650
Asn Gly Ile Ser Arg Asn Ser Ser Ser Pro Cys Ile Ser Gly Thr Thr		655
	660	665
His Thr Leu His Asp Ser Ser Val Ala Ser Ile Glu Thr Lys Ser Arg		670
	675	680
Gln Arg Ser His Ser Ser Ile Gln Phe Ser Phe Lys Glu Lys Leu Ser		685
	690	695
Glu Lys Val Ser Glu Lys Glu Thr Ile Val Lys Glu Ser Gly Lys Gln		700
705	710	715
Pro Gly Ala Lys Pro Lys Val Lys Leu Ala Arg Lys Lys Asp Asp Asp		720

				725						730					735		
Lys	Lys	Lys	Ser	Ser	Asn	Glu	Lys	Leu	Lys	Gln	Thr	Ser	Val	Phe	Phe		
			740						745					750			
Ser	Asp	Gly	Leu	Asp	Leu	Glu	Asn	Trp	Tyr	Ser	Cys	Gly	Glu	Gly	Asp		
		755					760						765				
Ile	Ser	Glu	Ile	Glu	Ser	Asp	Met	Gly	Ser	Pro	Gly	Ser	Arg	Lys	Ser		
		770				775					780						
Pro	Asn	Phe	Asn	Ile	His	Pro	Leu	Tyr	Gln	His	Val	Leu	Leu	Tyr	Leu		
					790					795					800		
Gln	Leu	Tyr	Asp	Ser	Ser	Arg	Thr	Leu	Tyr	Ala	Phe	Ser	Ala	Ile	Lys		
				805					810					815			
Ala	Ile	Leu	Lys	Thr	Asn	Pro	Ile	Ala	Phe	Val	Asn	Ala	Ile	Ser	Thr		
			820						825					830			
Thr	Ser	Val	Asn	Asn	Ala	Tyr	Thr	Pro	Gln	Leu	Ser	Leu	Leu	Gln	Asn		
		835					840					845					
Leu	Leu	Ala	Arg	His	Arg	Ile	Ser	Val	Met	Gly	Lys	Asp	Phe	Tyr	Ser		
		850				855					860						
His	Ile	Pro	Val	Asp	Ser	Asn	His	Asn	Phe	Arg	Ser	Ser	Met	Tyr	Ile		
				870						875				880			
Glu	Ile	Leu	Ile	Ser	Leu	Cys	Leu	Tyr	Tyr	Met	Arg	Ser	His	Tyr	Pro		
				885					890					895			
Thr	His	Val	Lys	Val	Thr	Ala	Gln	Asp	Leu	Ile	Gly	Asn	Arg	Asn	Met		
			900					905					910				
Gln	Met	Met	Ser	Ile	Glu	Ile	Leu	Thr	Leu	Leu	Phe	Thr	Glu	Leu	Ala		
		915					920					925					
Lys	Val	Ile	Glu	Ser	Ser	Ala	Lys	Gly	Phe	Pro	Ser	Phe	Ile	Ser	Asp		
		930					935					940					
Met	Leu	Ser	Lys	Cys	Lys	Val	Gln	Lys	Val	Ile	Leu	His	Cys	Leu	Leu		
					950					955				960			
Ser	Ser	Ile	Phe	Ser	Ala	Gln	Lys	Trp	His	Ser	Glu	Lys	Met	Ala	Gly		
			965						970					975			
Lys	Asn	Leu	Val	Ala	Val	Glu	Glu	Gly	Phe	Ser	Glu	Asp	Ser	Leu	Ile		
			980						985				990				
Asn	Phe	Ser	Glu	Asp	Glu	Phe	Asp	Asn	Gly	Ser	Thr	Leu	Gln	Ser	Gln		
		995					1000					1005					
Leu	Leu	Lys	Val	Leu	Gln	Arg	Leu	Ile	Val	Leu	Glu	His	Arg	Val	Met		
		1010				1015					1020						
Thr	Ile	Pro	Glu	Glu	Asn	Glu	Thr	Gly	Phe	Asp	Phe	Val	Val	Ser	Asp		
		1025				1030				1035				1040			
Leu	Glu	His	Ile	Ser	Pro	His	Gln	Pro	Met	Thr	Ser	Leu	Gln	Tyr	Leu		
			1045						1050					1055			
His	Ala	Gln	Ser	Ile	Thr	Cys	Gln	Gly	Met	Phe	Leu	Cys	Ala	Val	Ile		
			1060					1065					1070				
Arg	Ala	Leu	His	Gln	His	Cys	Ala	Cys	Lys	Met	His	Pro	Gln	Trp	Ile		
		1075					1080					1085					
Gly	Leu	Ile	Thr	Ser	Thr	Leu	Pro	Tyr	Met	Gly	Lys	Val	Leu	Gln	Arg		
		1090				1095					1100						
Val	Val	Val	Ser	Val	Thr	Leu	Gln	Leu	Cys	Arg	Asn	Leu	Asp	Asn	Leu		
		1105				1110				1115				1120			
Ile	Gln	Gln	Tyr	Lys	Tyr	Glu	Thr	Gly	Leu	Ser	Asp	Ser	Arg	Pro	Leu		
			1125						1130				1135				
Trp	Met	Ala	Ser	Ile	Ile	Pro	Pro	Asp	Met	Ile	Leu	Thr	Leu	Leu	Glu		
			1140					1145					1150				
Gly	Ile	Thr	Ala	Ile	Ile	His	Tyr	Cys	Leu	Leu	Asp	Pro	Thr	Thr	Gln		
			1155				1160					1165					
Tyr	His	Gln	Leu	Leu	Val	Ser	Val	Asp	Gln	Lys	His	Leu	Phe	Glu	Ala		
		1170				1175					1180						
Arg	Ser	Gly	Ile	Leu	Ser	Ile	Leu	His	Met	Ile	Met	Ser	Ser	Val	Thr		
			1185			1190				1195				1200			
Leu	Leu	Trp	Ser	Ile	Leu	His	Gln	Ala	Asp	Ser	Ser	Glu	Lys	Met	Thr		
			1205						1210				1215				
Ile	Ala	Ala	Ser	Ala	Ser	Leu	Thr	Thr	Ile	Asn	Leu	Gly	Ala	Thr	Lys		
			1220				1225					1230					
Asn	Leu	Arg	Gln	Gln	Ile	Leu	Glu	Leu	Leu	Gly	Pro	Ile	Ser	Met	Asn		

1235	1240	1245
His Gly Val His Phe Met Ala Ala Ile Ala Phe Val Trp Asn Glu Arg		
1250	1255	1260
Arg Gln Asn Lys Thr Thr Thr Arg Thr Lys Val Ile Pro Ala Ala Ser		
1265	1270	1275
Glu Glu Gln Leu Leu Leu Val Glu Leu Val Arg Ser Ile Ser Val Met		1280
1285	1290	1295
Arg Ala Glu Thr Val Ile Gln Thr Val Lys Glu Val Leu Lys Gln Pro		
1300	1305	1310
Pro Ala Ile Ala Lys Asp Lys Lys His Leu Ser Leu Glu Val Cys Met		
1315	1320	1325
Leu Gln Phe Phe Tyr Ala Tyr Ile Gln Arg Ile Pro Val Pro Asn Leu		
1330	1335	1340
Val Asp Ser Trp Ala Ser Leu Leu Ile Leu Leu Lys Asp Ser Ile Gln		
1345	1350	1355
Leu Ser Leu Pro Ala Pro Gly Gln Phe Leu Ile Leu Gly Val Leu Asn		1360
1365	1370	1375
Glu Phe Ile Met Lys Asn Pro Ser Leu Glu Asn Lys Lys Asp Gln Arg		
1380	1385	1390
Asp Leu Gln Asp Val Thr His Lys Ile Val Asp Ala Ile Gly Ala Ile		
1395	1400	1405
Ala Gly Ser Ser Leu Glu Gln Thr Thr Trp Leu Arg Arg Asn Leu Glu		
1410	1415	1420
Val Lys Pro Ser Pro Lys Ile Met Val Asp Gly Thr Asn Leu Glu Ser		
1425	1430	1435
Asp Val Glu Asp Met Leu Ser Pro Ala Met Glu Thr Ala Asn Ile Thr		1440
1445	1450	1455
Pro Ser Val Tyr Ser Val His Ala Leu Thr Leu Leu Ser Glu Val Leu		
1460	1465	1470
Ala His Leu Leu Asp Met Val Phe Tyr Ser Asp Glu Lys Glu Arg Val		
1475	1480	1485
Ile Pro Leu Leu Val Asn Ile Met His Tyr Val Val Pro Tyr Leu Arg		
1490	1495	1500
Asn His Ser Ala His Asn Ala Pro Ser Tyr Arg Ala Cys Val Gln Leu		
1505	1510	1515
Leu Ser Ser Leu Ser Gly Tyr Gln Tyr Thr Arg Arg Ala Trp Lys Lys		1520
1525	1530	1535
Glu Ala Phe Asp Leu Phe Met Asp Pro Ser Phe Phe Gln Met Asp Ala		
1540	1545	1550
Ser Cys Val Asn His Trp Arg Ala Ile Met Asp Asn Leu Met Thr His		
1555	1560	1565
Asp Lys Thr Thr Phe Arg Asp Leu Met Thr Arg Val Ala Val Ala Gln		
1570	1575	1580
Ser Ser Ser Leu Asn Leu Phe Ala Asn Arg Asp Val Glu Leu Glu Gln		
1585	1590	1595
Arg Ala Met Leu Leu Lys Arg Leu Ala Phe Ala Ile Phe Ser Ser Glu		1600
1605	1610	1615
Ile Asp Gln Tyr Gln Lys Tyr Leu Pro Asp Ile Gln Glu Arg Leu Val		
1620	1625	1630
Glu Ser Leu Arg Leu Pro Gln Val Pro Thr Leu His Ser Gln Val Phe		
1635	1640	1645
Leu Phe Phe Arg Val Leu Leu Leu Arg Met Ser Pro Gln His Leu Thr		
1650	1655	1660
Ser Leu Trp Pro Thr Met Ile Thr Glu Leu Val Gln Val Phe Leu Leu		
1665	1670	1675
Met Glu Gln Glu Leu Thr Ala Asp Glu Asp Ile Ser Arg Thr Ser Gly		1680
1685	1690	1695
Pro Ser Val Ala Gly Leu Glu Thr Thr Tyr Thr Gly Gly Asn Gly Phe		
1700	1705	1710
Ser Thr Ser Tyr Asn Ser Gln Arg Trp Leu Asn Leu Tyr Leu Ser Ala		
1715	1720	1725
Cys Lys Phe Leu Asp Leu Ala Leu Ala Leu Pro Ser Glu Asn Leu Pro		
1730	1735	1740
Gln Phe Gln Met Tyr Arg Trp Ala Phe Ile Pro Glu Ala Ser Asp Asp		

1745 1750 1755 1760
 Ser Gly Leu Glu Val Arg Arg Gln Gly Ile His Gln Arg Glu Phe Lys
 1765 1770 1775
 Pro Tyr Val Val Arg Leu Ala Lys Leu Leu Arg Lys Arg Ala Lys Lys
 1780 1785 1790
 Asn Pro Glu Glu Asp Asn Ser Gly Arg Thr Leu Gly Trp Glu Pro Gly
 1795 1800 1805
 His Leu Leu Leu Thr Ile Cys Thr Val Arg Ser Met Glu Gln Leu Leu
 1810 1815 1820
 Pro Phe Phe Asn Val Leu Ser Gln Val Phe Asn Ser Lys Val Thr Ser
 1825 1830 1835 1840
 Arg Cys Gly Gly His Ser Gly Ser Pro Ile Leu Tyr Ser Asn Ala Phe
 1845 1850 1855
 Pro Asn Lys Asp Met Lys Leu Glu Asn His Lys Pro Cys Ser Ser Lys
 1860 1865 1870
 Ala Arg Gln Lys Ile Glu Glu Met Val Glu Lys Asp Phe Leu Glu Gly
 1875 1880 1885
 Met Ile Lys Thr
 1890 1892

<210> 3531
 <211> 641
 <212> PRT
 <213> Homo sapiens

<400> 3531
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 Leu Lys Glu Asn Leu Glu Asp Ile Ser Gly Trp Gly Leu Pro Glu Ala
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 Arg Ser Lys Glu Ser Val Ser Phe Lys Asp Val Ala Val Asp Phe Thr
 35 40 45
 Gln Glu Glu Trp Gly Gln Leu Asp Ser Pro Gln Arg Ala Leu Tyr Arg
 50 55 60
 Asp Val Met Leu Glu Asn Tyr Gln Asn Leu Leu Ala Leu Gly Pro Pro
 65 70 75 80
 Leu His Lys Pro Asp Val Ile Ser His Leu Glu Arg Gly Glu Glu Pro
 85 90 95
 Trp Ser Met Gln Arg Glu Val Pro Arg Gly Pro Cys Pro Glu Trp Glu
 100 105 110
 Leu Lys Ala Val Pro Ser Gln Gln Gln Gly Ile Cys Lys Glu Glu Pro
 115 120 125
 Ala Gln Glu Pro Ile Met Glu Arg Pro Leu Gly Gly Ala Gln Ala Trp
 130 135 140
 Gly Arg Gln Ala Gly Ala Leu Gln Arg Ser Gln Ala Ala Pro Gly Arg
 145 150 155 160
 Arg Thr Cys His Gly Leu Gly Arg Pro Val Glu Glu Phe Pro Leu Arg
 165 170 175
 Cys Pro Leu Phe Ala Gln Gln Arg Val Pro Glu Gly Gly Pro Leu Leu
 180 185 190
 Asp Thr Arg Lys Asn Val Gln Ala Thr Glu Gly Arg Thr Lys Ala Pro
 195 200 205
 Ala Arg Leu Cys Ala Gly Glu Asn Ala Ser Thr Pro Ser Glu Pro Glu
 210 215 220
 Lys Phe Pro Gln Val Arg Arg Gln Arg Gly Ala Gly Ala Gly Glu Gly
 225 230 235 240
 Glu Phe Val Cys Gly Glu Cys Gly Lys Ala Phe Arg Gln Ser Ser Ser
 245 250 255
 Leu Thr Leu His Arg Arg Trp His Ser Arg Glu Lys Ala Tyr Lys Cys
 260 265 270
 Asp Glu Cys Gly Lys Ala Phe Thr Trp Ser Thr Asn Leu Leu Glu His

275 280 285
 Arg Arg Ile His Thr Gly Glu Lys Pro Phe Phe Cys Gly Glu Cys Gly
 290 295 300
 Lys Ala Phe Ser Cys His Ser Ser Leu Asn Val His Gln Arg Ile His
 305 310 315 320
 Thr Gly Glu Arg Pro Tyr Lys Cys Ser Ala Cys Glu Lys Ala Phe Ser
 325 330 335
 Cys Ser Ser Leu Leu Ser Met His Leu Arg Val His Thr Gly Glu Lys
 340 345 350
 Pro Tyr Arg Cys Gly Glu Cys Gly Lys Ala Phe Asn Gln Arg Thr His
 355 360 365
 Leu Thr Arg His His Arg Ile His Thr Gly Glu Lys Pro Tyr Gln Cys
 370 375 380
 Gly Ser Cys Gly Lys Ala Phe Thr Cys His Ser Ser Leu Thr Val His
 385 390 395 400
 Glu Lys Ile His Ser Gly Asp Lys Pro Phe Lys Cys Ser Asp Cys Glu
 405 410 415
 Lys Ala Phe Asn Ser Arg Ser Arg Leu Thr Leu His Gln Arg Thr His
 420 425 430
 Thr Gly Glu Lys Pro Phe Lys Cys Ala Asp Cys Gly Lys Gly Phe Ser
 435 440 445
 Cys His Ala Tyr Leu Leu Val His Arg Arg Ile His Ser Gly Glu Lys
 450 455 460
 Pro Phe Lys Cys Asn Glu Cys Gly Lys Ala Phe Ser Ser His Ala Tyr
 465 470 475 480
 Leu Ile Val His Arg Arg Ile His Thr Gly Glu Lys Pro Phe Asp Cys
 485 490 495
 Ser Gln Cys Trp Lys Ala Phe Ser Cys His Ser Ser Leu Ile Val His
 500 505 510
 Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Ser Glu Cys Gly
 515 520 525
 Arg Ala Phe Ser Gln Asn His Cys Leu Ile Lys His Gln Lys Ile His
 530 535 540
 Ser Gly Glu Lys Ser Phe Lys Cys Glu Lys Cys Gly Glu Met Phe Asn
 545 550 555 560
 Trp Ser Ser His Leu Thr Glu His Gln Arg Leu His Ser Glu Gly Lys
 565 570 575
 Pro Leu Ala Ile Gln Phe Asn Lys His Leu Leu Ser Thr Tyr Tyr Val
 580 585 590
 Pro Gly Ser Leu Leu Gly Ala Gly Asp Ala Gly Leu Arg Asp Val Asp
 595 600 605
 Pro Ile Asp Ala Leu Asp Val Ala Lys Leu Leu Cys Val Val Pro Pro
 610 615 620
 Arg Ala Gly Arg Asn Phe Ser Leu Gly Ser Lys Pro Arg Asn
 625 630 635 638

<210> 3532

<211> 1205

<212> PRT

<213> Homo sapiens

<400> 3532

His Arg Glu Leu Gln Asp Ser Pro Ser Ala Glu Pro Pro Ala Gly Ser
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 Met Pro Leu Arg His Trp Gly Met Ala Arg Gly Ser Lys Pro Val Gly
 20 25 30
 Asp Gly Ala Gln Pro Met Ala Ala Met Gly Gly Leu Lys Val Leu Leu
 35 40 45
 His Trp Ala Gly Pro Gly Gly Glu Pro Trp Val Thr Phe Ser Glu
 50 55 60
 Ser Ser Leu Thr Ala Glu Glu Val Cys Ile His Ile Ala His Lys Val

65					70					75				80	
Gly	Ile	Thr	Pro	Pro	Cys	Phe	Asn	Leu	Phe	Ala	Leu	Phe	Asp	Ala	Gln
				85						90				95	
Ala	Gln	Val	Trp	Leu	Pro	Pro	Asn	His	Ile	Leu	Glu	Ile	Pro	Arg	Asp
			100					105						110	
Ala	Ser	Leu	Met	Leu	Tyr	Phe	Arg	His	Arg	Phe	Tyr	Ser	Arg	Asn	Trp
		115					120					125			
His	Gly	Met	Asn	Pro	Arg	Glu	Pro	Ala	Val	Tyr	Arg	Cys	Gly	Pro	Pro
		130				135					140				
Gly	Thr	Glu	Ala	Ser	Ser	Asp	Gln	Thr	Ala	Gln	Gly	Met	Gln	Leu	Leu
145					150					155				160	
Asp	Pro	Ala	Ser	Phe	Glu	Tyr	Leu	Phe	Glu	Gln	Gly	Lys	His	Glu	Phe
				165					170					175	
Val	Asn	Asp	Val	Ala	Ser	Leu	Trp	Glu	Leu	Ser	Thr	Glu	Glu	Glu	Ile
			180					185					190		
His	His	Phe	Lys	Asn	Glu	Ser	Leu	Gly	Met	Ala	Phe	Leu	His	Leu	Cys
		195					200					205			
His	Leu	Ala	Leu	Arg	His	Gly	Ile	Pro	Leu	Glu	Glu	Val	Ala	Lys	Lys
		210				215						220			
Thr	Ser	Phe	Lys	Asp	Cys	Ile	Pro	Arg	Ser	Phe	Arg	Arg	His	Ile	Arg
225				230							235			240	
Gln	His	Ser	Ala	Leu	Thr	Arg	Leu	Arg	Leu	Arg	Asn	Val	Phe	Arg	Arg
				245					250					255	
Phe	Leu	Arg	Asp	Phe	Gln	Pro	Gly	Arg	Leu	Ser	Gln	Gln	Met	Val	Met
			260				265						270		
Val	Lys	Tyr	Leu	Ala	Thr	Leu	Glu	Arg	Leu	Ala	Pro	Arg	Phe	Gly	Thr
		275					280					285			
Glu	Arg	Val	Pro	Val	Cys	His	Leu	Arg	Leu	Leu	Ala	Gln	Ala	Glu	Gly
		290				295					300				
Glu	Pro	Cys	Tyr	Ile	Arg	Asp	Ser	Gly	Val	Ala	Pro	Thr	Asp	Pro	Gly
305					310					315				320	
Pro	Glu	Ser	Ala	Ala	Gly	Pro	Pro	Thr	His	Glu	Val	Leu	Val	Thr	Gly
				325					330					335	
Thr	Gly	Gly	Ile	Gln	Trp	Trp	Pro	Val	Glu	Glu	Glu	Val	Asn	Lys	Glu
			340					345					350		
Glu	Gly	Ser	Ser	Gly	Ser	Ser	Gly	Arg	Asn	Pro	Gln	Ala	Ser	Leu	Phe
		355					360					365			
Gly	Lys	Lys	Ala	Lys	Ala	His	Lys	Ala	Phe	Gly	Gln	Pro	Ala	Asp	Arg
		370				375					380				
Pro	Arg	Glu	Pro	Leu	Gly	Ala	Tyr	Phe	Cys	Asp	Phe	Arg	Asp	Ile	Thr
385					390					395				400	
His	Val	Gly	Leu	Lys	Glu	His	Cys	Val	Ser	Ile	His	Arg	Gln	Asp	Asn
				405					410					415	
Lys	Cys	Leu	Glu	Leu	Ser	Leu	Pro	Ser	Arg	Ala	Ala	Ala	Leu	Ser	Phe
			420						425				430		
Val	Ser	Leu	Val	Asp	Gly	Tyr	Phe	Arg	Leu	Thr	Ala	Asp	Ser	Ser	His
		435					440					445			
Tyr	Leu	Cys	His	Glu	Val	Ala	Pro	Pro	Arg	Leu	Val	Met	Ser	Ile	Arg
		450				455					460				
Asp	Gly	Ile	His	Gly	Pro	Leu	Leu	Glu	Pro	Phe	Val	Gln	Ala	Lys	Leu
465					470					475				480	
Arg	Pro	Glu	Asp	Gly	Leu	Tyr	Leu	Ile	His	Trp	Ser	Thr	Ser	His	Pro
				485					490					495	
Tyr	Arg	Leu	Ile	Leu	Thr	Val	Ala	Gln	Arg	Ser	Gln	Ala	Pro	Asp	Gly
			500					505					510		
Met	Gln	Ser	Leu	Arg	Leu	Arg	Lys	Phe	Pro	Ile	Glu	Gln	Gln	Asp	Gly
			515				520					525			
Ala	Phe	Val	Leu	Glu	Gly	Trp	Gly	Arg	Ser	Phe	Pro	Ser	Val	Arg	Glu
			530				535				540				
Leu	Gly	Ala	Ala	Leu	Gln	Gly	Cys	Leu	Leu	Arg	Ala	Gly	Asp	Asp	Cys
545					550					555				560	
Phe	Ser	Leu	Arg	Arg	Cys	Cys	Leu	Pro	Gln	Pro	Gly	Glu	Thr	Ser	Asn
				565					570					575	
Leu	Ile	Ile	Met	Arg	Gly	Ala	Arg	Ala	Ser	Pro	Arg	Thr	Leu	Asn	Leu

580				585				590							
Ser	Gln	Leu	Ser	Phe	His	Arg	Val	Asp	Gln	Lys	Glu	Ile	Thr	Gln	Leu
595				600				605							
Ser	His	Leu	Gly	Gln	Gly	Thr	Arg	Thr	Asn	Val	Tyr	Glu	Gly	Arg	Leu
610				615				620							
Arg	Val	Glu	Gly	Ser	Gly	Asp	Pro	Glu	Glu	Gly	Lys	Met	Asp	Asp	Glu
625				630				635				640			
Asp	Pro	Leu	Val	Pro	Gly	Arg	Asp	Arg	Gly	Gln	Glu	Leu	Arg	Val	Val
				645				650				655			
Leu	Lys	Val	Leu	Asp	Pro	Ser	His	His	Asp	Ile	Ala	Leu	Ala	Phe	Tyr
				660				665				670			
Glu	Thr	Ala	Ser	Leu	Met	Ser	Gln	Val	Ser	His	Thr	His	Leu	Ala	Phe
				675				680				685			
Val	His	Gly	Val	Cys	Val	Arg	Gly	Pro	Glu	Asn	Ile	Met	Val	Thr	Glu
				690				695				700			
Tyr	Val	Glu	His	Gly	Pro	Leu	Asp	Val	Trp	Leu	Arg	Arg	Glu	Arg	Gly
705				710				715				720			
His	Val	Pro	Met	Ala	Trp	Lys	Met	Val	Val	Ala	Gln	Gln	Leu	Ala	Ser
				725				730				735			
Ala	Leu	Ser	Tyr	Leu	Glu	Asn	Lys	Asn	Leu	Val	His	Gly	Asn	Val	Cys
				740				745				750			
Gly	Arg	Asn	Ile	Leu	Leu	Ala	Arg	Leu	Gly	Leu	Ala	Glu	Gly	Thr	Ser
				755				760				765			
Pro	Phe	Ile	Lys	Leu	Ser	Asp	Pro	Gly	Val	Gly	Leu	Gly	Ala	Leu	Ser
770				775				780							
Arg	Glu	Glu	Arg	Val	Glu	Arg	Ile	Pro	Trp	Leu	Ala	Pro	Glu	Cys	Leu
785				790				795				800			
Pro	Gly	Gly	Ala	Asn	Ser	Leu	Ser	Thr	Ala	Met	Asp	Lys	Trp	Gly	Phe
				805				810				815			
Gly	Ala	Thr	Leu	Leu	Glu	Ile	Cys	Phe	Asp	Gly	Glu	Ala	Pro	Leu	Gln
				820				825				830			
Ser	Arg	Ser	Pro	Ser	Glu	Lys	Glu	His	Phe	Tyr	Gln	Arg	Gln	His	Arg
835				840				845							
Leu	Pro	Glu	Pro	Ser	Cys	Pro	Gln	Leu	Ala	Thr	Leu	Thr	Ser	Gln	Cys
850				855				860							
Leu	Thr	Tyr	Glu	Pro	Thr	Gln	Arg	Pro	Ser	Phe	Arg	Thr	Ile	Leu	Arg
865				870				875				880			
Asp	Leu	Thr	Arg	Leu	Gln	Pro	His	Asn	Leu	Ala	Asp	Val	Leu	Thr	Val
				885				890				895			
Asn	Pro	Asp	Ser	Pro	Ala	Ser	Asp	Pro	Thr	Val	Phe	His	Lys	Arg	Tyr
				900				905				910			
Leu	Lys	Lys	Ile	Arg	Asp	Leu	Gly	Glu	Gly	His	Phe	Gly	Lys	Val	Ser
915				920				925							
Leu	Tyr	Cys	Tyr	Asp	Pro	Thr	Asn	Asp	Gly	Thr	Gly	Glu	Met	Val	Ala
930				935				940							
Val	Lys	Ala	Leu	Lys	Ala	Asp	Cys	Gly	Pro	Gln	His	Arg	Ser	Gly	Trp
945				950				955				960			
Lys	Gln	Glu	Ile	Asp	Ile	Leu	Arg	Thr	Leu	Tyr	His	Glu	His	Ile	Ile
				965				970				975			
Lys	Tyr	Lys	Gly	Cys	Cys	Glu	Asp	Gln	Gly	Glu	Lys	Ser	Leu	Gln	Leu
				980				985				990			
Val	Met	Glu	Tyr	Val	Pro	Leu	Gly	Ser	Leu	Arg	Asp	Tyr	Leu	Pro	Arg
995				1000				1005							
His	Ser	Ile	Gly	Leu	Ala	Gln	Leu	Leu	Leu	Phe	Ala	Gln	Gln	Ile	Cys
1010				1015				1020							
Glu	Gly	Met	Ala	Tyr	Leu	His	Ala	Gln	His	Tyr	Ile	His	Arg	Asp	Leu
1025				1030				1035				1040			
Ala	Ala	Arg	Asn	Val	Leu	Leu	Asp	Asn	Asp	Arg	Leu	Val	Lys	Ile	Gly
				1045				1050				1055			
Asp	Phe	Gly	Leu	Ala	Lys	Ala	Val	Pro	Glu	Gly	His	Glu	Tyr	Tyr	Arg
				1060				1065				1070			
Val	Arg	Glu	Asp	Gly	Asp	Ser	Pro	Val	Phe	Trp	Tyr	Ala	Pro	Glu	Cys
1075				1080				1085							
Leu	Lys	Glu	Tyr	Lys	Phe	Tyr	Tyr	Ala	Ser	Asp	Val	Trp	Ser	Phe	Gly

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      1090              1095              1100
Val Thr Leu Tyr Glu Leu Leu Thr His Cys Asp Ser Ser Gln Ser Pro
1105              1110              1115              1120
Pro Thr Lys Phe Leu Glu Leu Ile Gly Ile Ala Gln Gly Gln Met Thr
      1125              1130              1135
Val Leu Arg Leu Thr Glu Leu Leu Glu Arg Gly Glu Arg Leu Pro Arg
      1140              1145              1150
Pro Asp Lys Cys Pro Cys Glu Val Tyr His Leu Met Lys Asn Cys Trp
      1155              1160              1165
Glu Thr Glu Ala Ser Phe Arg Pro Thr Phe Glu Asn Leu Ile Pro Ile
      1170              1175              1180
Leu Lys Thr Val His Glu Lys Tyr Gln Gly Gln Ala Pro Ser Val Phe
1185              1190              1195              1200
Ser Val Cys
      1203

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<210> 3533
<211> 1096
<212> PRT
<213> Homo sapiens

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Phe Gly Arg Lys Lys Glu Asn Met Thr Ser Pro Ala Lys Phe Lys Lys
      20              25              30
Asp Lys Glu Ile Ile Ala Glu Tyr Asp Thr Gln Val Lys Glu Ile Arg
      35              40              45
Ala Gln Leu Thr Glu Gln Met Lys Cys Leu Asp Gln Gln Cys Glu Leu
      50              55              60
Arg Val Gln Leu Leu Gln Asp Leu Gln Asp Phe Phe Arg Lys Lys Ala
      65              70              75              80
Glu Ile Glu Met Asp Tyr Ser Arg Asn Leu Glu Lys Leu Ala Glu Arg
      85              90              95
Phe Leu Ala Lys Thr Arg Ser Thr Lys Asp Gln Gln Phe Lys Lys Asp
      100              105              110
Gln Asn Val Leu Ser Pro Val Asn Cys Trp Asn Leu Leu Asn Gln
      115              120              125
Val Lys Arg Glu Ser Arg Asp His Thr Thr Leu Ser Asp Ile Tyr Leu
      130              135              140
Asn Asn Ile Ile Pro Arg Phe Val Gln Val Ser Glu Asp Ser Gly Arg
      145              150              155              160
Leu Phe Lys Lys Ser Lys Glu Val Gly Gln Gln Leu Gln Asp Asp Leu
      165              170              175
Met Lys Val Leu Asn Glu Leu Tyr Ser Val Met Lys Thr Tyr His Met
      180              185              190
Tyr Asn Ala Asp Ser Ile Ser Ala Gln Ser Lys Leu Lys Glu Ala Glu
      195              200              205
Lys Gln Glu Glu Lys Gln Ile Gly Lys Ser Val Lys Gln Glu Asp Arg
      210              215              220
Gln Thr Pro Arg Ser Pro Asp Ser Thr Ala Asn Val Arg Ile Glu Glu
      225              230              235              240
Lys His Val Arg Arg Ser Ser Val Lys Lys Ile Glu Lys Met Lys Glu
      245              250              255
Lys Arg Gln Ala Lys Tyr Thr Glu Asn Lys Leu Lys Ala Ile Lys Ala
      260              265              270
Arg Asn Glu Tyr Leu Leu Ala Leu Glu Ala Thr Asn Ala Ser Val Phe
      275              280              285
Lys Tyr Tyr Ile His Asp Leu Ser Asp Leu Ile Asp Gln Cys Cys Asp
      290              295              300
Leu Gly Tyr His Ala Ser Leu Asn Arg Ala Leu Arg Thr Phe Leu Ser

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305		310		315		320									
Ala	Glu	Leu	Asn	Leu	Glu	Gln	Ser	Lys	His	Glu	Gly	Leu	Asp	Ala	Ile
		325							330					335	
Glu	Asn	Ala	Val	Glu	Asn	Leu	Asp	Ala	Thr	Ser	Asp	Lys	Gln	Arg	Leu
		340						345					350		
Met	Glu	Met	Tyr	Asn	Asn	Val	Phe	Cys	Pro	Pro	Met	Lys	Phe	Glu	Phe
		355					360					365			
Gln	Pro	His	Met	Gly	Asp	Met	Ala	Ser	Gln	Leu	Cys	Ala	Gln	Gln	Pro
		370				375					380				
Val	Gln	Ser	Glu	Leu	Leu	Gln	Arg	Cys	Leu	Gln	Leu	Gln	Ser	Arg	Leu
385						390					395				400
Ser	Thr	Leu	Lys	Ile	Glu	Asn	Glu	Glu	Val	Lys	Lys	Thr	Met	Glu	Ala
				405					410					415	
Thr	Leu	Gln	Thr	Ile	Gln	Asp	Ile	Val	Thr	Val	Glu	Asp	Phe	Asp	Val
			420				425						430		
Ser	Asp	Cys	Phe	Gln	Tyr	Ser	Asn	Ser	Met	Glu	Ser	Val	Lys	Ser	Thr
		435					440					445			
Val	Ser	Glu	Thr	Phe	Met	Ser	Lys	Pro	Ser	Ile	Ala	Lys	Arg	Arg	Ala
		450				455					460				
Asn	Gln	Gln	Glu	Thr	Glu	Gln	Phe	Tyr	Phe	Thr	Lys	Met	Lys	Glu	Tyr
465						470					475				480
Leu	Glu	Gly	Arg	Asn	Leu	Ile	Thr	Lys	Leu	Gln	Ala	Lys	His	Asp	Leu
				485					490					495	
Leu	Gln	Lys	Thr	Leu	Gly	Glu	Ser	Gln	Arg	Thr	Asp	Cys	Ser	Leu	Ala
			500						505				510		
Arg	Arg	Ser	Ser	Thr	Val	Arg	Lys	Gln	Asp	Ser	Ser	Gln	Ala	Ile	Pro
		515					520					525			
Leu	Val	Val	Glu	Ser	Cys	Ile	Arg	Phe	Ile	Ser	Arg	His	Gly	Leu	Gln
		530				535					540				
His	Glu	Gly	Ile	Phe	Arg	Val	Ser	Gly	Ser	Gln	Val	Glu	Val	Asn	Asp
545						550					555				560
Ile	Lys	Asn	Ala	Phe	Glu	Arg	Gly	Glu	Asp	Pro	Leu	Ala	Gly	Asp	Gln
				565					570					575	
Asn	Asp	His	Asp	Met	Asp	Ser	Ile	Ala	Gly	Val	Leu	Lys	Leu	Tyr	Phe
			580						585				590		
Arg	Gly	Leu	Glu	His	Pro	Leu	Phe	Pro	Lys	Asp	Ile	Phe	His	Asp	Leu
		595					600					605			
Met	Ala	Cys	Val	Thr	Met	Asp	Asn	Leu	Gln	Glu	Arg	Ala	Leu	His	Ile
		610				615					620				
Arg	Lys	Val	Leu	Leu	Val	Leu	Pro	Lys	Thr	Thr	Leu	Ile	Ile	Met	Arg
625						630					635				640
Tyr	Leu	Phe	Ala	Phe	Leu	Asn	His	Leu	Ser	Gln	Phe	Ser	Glu	Glu	Asn
				645					650					655	
Met	Met	Asp	Pro	Tyr	Asn	Leu	Ala	Ile	Cys	Phe	Gly	Pro	Ser	Leu	Met
			660						665				670		
Ser	Val	Pro	Glu	Gly	His	Asp	Gln	Val	Ser	Cys	Gln	Ala	His	Val	Asn
		675					680					685			
Glu	Leu	Ile	Lys	Thr	Ile	Ile	Gln	His	Glu	Asn	Ile	Phe	Pro	Ser	
		690				695					700				
Pro	Arg	Glu	Leu	Glu	Gly	Pro	Val	Tyr	Ser	Arg	Gly	Gly	Ser	Met	Glu
705						710					715				720
Asp	Tyr	Cys	Asp	Ser	Pro	His	Gly	Glu	Thr	Thr	Ser	Val	Glu	Asp	Ser
				725						730				735	
Thr	Gln	Asp	Val	Thr	Ala	Glu	His	His	Thr	Ser	Asp	Asp	Glu	Cys	Glu
			740						745					750	
Pro	Ile	Glu	Ala	Ile	Ala	Lys	Phe	Asp	Tyr	Val	Gly	Arg	Thr	Ala	Arg
		755					760					765			
Glu	Leu	Ser	Phe	Lys	Lys	Gly	Ala	Ser	Leu	Leu	Leu	Tyr	Gln	Arg	Ala
		770				775					780				
Ser	Asp	Asp	Trp	Trp	Glu	Gly	Arg	His	Asn	Gly	Ile	Asp	Gly	Leu	Ile
785						790					795				800
Pro	His	Gln	Tyr	Ile	Val	Val	Gln	Asp	Thr	Glu	Asp	Gly	Val	Val	Glu
				805					810					815	
Arg	Ser	Ser	Pro	Lys	Ser	Glu	Ile	Glu	Val	Ile	Ser	Glu	Pro	Pro	Glu

820 825 830
 Glu Lys Val Thr Ala Arg Ala Gly Ala Ser Cys Pro Ser Gly Gly His
 835 840 845
 Val Ala Asp Ile Tyr Leu Ala Asn Ile Asn Lys Gln Arg Lys Arg Pro
 850 855 860
 Glu Ser Gly Ser Ile Arg Lys Thr Phe Arg Ser Asp Ser His Gly Leu
 865 870 875 880
 Ser Ser Ser Leu Thr Asp Ser Ser Ser Pro Gly Val Gly Ala Ser Cys
 885 890 895
 Arg Pro Ser Ser Gln Pro Ile Met Ser Gln Ser Leu Pro Lys Glu Gly
 900 905 910
 Pro Asp Lys Cys Ser Ile Ser Gly His Gly Ser Leu Asn Ser Ile Ser
 915 920 925
 Arg His Ser Ser Leu Lys Asn Arg Leu Asp Ser Pro Gln Ile Arg Lys
 930 935 940
 Thr Ala Thr Ala Gly Arg Ser Lys Ser Phe Asp Asn His Arg Pro Met
 945 950 955 960
 Asp Pro Glu Val Ile Ala Gln Asp Ile Glu Ala Thr Met Asn Ser Ala
 965 970 975
 Leu Asn Glu Leu Arg Glu Leu Glu Arg Gln Ser Ser Val Lys His Thr
 980 985 990
 Pro Asp Val Val Leu Asp Thr Leu Glu Pro Leu Lys Thr Ser Pro Val
 995 1000 1005
 Val Ala Pro Thr Ser Glu Pro Ser Ser Pro Leu His Thr Gln Leu Leu
 1010 1015 1020
 Lys Asp Pro Glu Pro Ala Phe Gln Arg Ser Ala Ser Thr Ala Gly Asp
 1025 1030 1035 1040
 Ile Ala Cys Ala Phe Arg Pro Val Lys Ser Val Lys Met Ala Ala Pro
 1045 1050 1055
 Val Lys Pro Pro Ala Thr Arg Pro Lys Pro Thr Val Phe Pro Lys Thr
 1060 1065 1070
 Asn Ala Thr Ser Pro Gly Val Asn Ser Ser Thr Ser Pro Gln Ser Thr
 1075 1080 1085
 Asp Lys Ser Cys Thr Val
 1090 1094

<210> 3534
 <211> 882
 <212> PRT
 <213> Homo sapiens

<400> 3534
 Phe Arg Arg Phe Val Cys Pro Ala Ser Arg Arg Pro Ala Ala Gly Leu
 1 5 10 15
 Arg Asp Ala Ala Ser Ser Ala Pro Arg Gly Met Ala Ser Glu Gly Pro
 20 25 30
 Arg Glu Pro Glu Ser Glu Gly Ile Lys Leu Ser Ala Asp Val Lys Pro
 35 40 45
 Phe Val Pro Arg Phe Ala Gly Leu Asn Val Ala Trp Leu Glu Ser Ser
 50 55 60
 Glu Ala Cys Val Phe Pro Ser Ser Ala Ala Thr Tyr Tyr Pro Phe Val
 65 70 75 80
 Gln Glu Pro Pro Val Thr Glu Gln Lys Ile Tyr Thr Glu Asp Met Ala
 85 90 95
 Phe Gly Ala Ser Thr Phe Pro Pro Gln Tyr Leu Ser Ser Glu Ile Thr
 100 105 110
 Leu His Pro Tyr Ala Tyr Ser Pro Tyr Thr Leu Asp Ser Thr Gln Asn
 115 120 125
 Val Tyr Ser Val Pro Gly Ser Gln Tyr Leu Tyr Asn Gln Pro Ser Cys
 130 135 140
 Tyr Arg Gly Phe Gln Thr Val Lys His Arg Asn Glu Asn Thr Cys Pro

145					150				155				160
Leu	Pro	Gln	Glu	Met	Lys	Ala	Leu	Phe	Lys	Lys	Lys	Thr	Tyr
				165					170				175
Lys	Lys	Thr	Tyr	Asp	Gln	Gln	Lys	Phe	Asp	Ser	Glu	Arg	Ala
			180					185					190
Thr	Ile	Ser	Ser	Glu	Ile	Lys	Ser	Ala	Arg	Gly	Ser	His	His
		195				200						205	
Ile	Tyr	Ala	Glu	Asn	Ser	Leu	Lys	Ser	Asp	Gly	Tyr	His	Lys
	210					215					220		
Asp	Arg	Lys	Ser	Arg	Ile	Ile	Ala	Lys	Asn	Val	Ser	Thr	Ser
	225				230				235				240
Glu	Phe	Glu	Phe	Thr	Thr	Leu	Asp	Phe	Pro	Glu	Leu	Gln	Gly
			245					250					255
Asn	Asn	Met	Ser	Glu	Ile	Gln	Lys	Gln	Pro	Lys	Trp	Gly	Pro
		260						265				270	
Ser	Val	Ser	Thr	Asp	Ile	Ser	Leu	Leu	Arg	Glu	Val	Val	Lys
	275					280						285	
Ala	Val	Leu	Ser	Lys	Gly	Glu	Ile	Val	Val	Lys	Asn	Asn	Pro
	290					295					300		
Ser	Val	Thr	Ala	Asn	Ala	Ala	Thr	Asn	Ser	Pro	Ser	Cys	Thr
	305				310				315				320
Leu	Ser	Trp	Thr	Pro	Met	Gly	Tyr	Val	Val	Arg	Gln	Thr	Leu
			325					330					335
Glu	Leu	Ser	Ala	Ala	Pro	Lys	Asn	Val	Thr	Ser	Met	Ile	Asn
		340						345				350	
Thr	Ile	Ala	Ser	Ser	Ala	Asp	Pro	Lys	Asn	Val	Ser	Ile	Pro
	355					360						365	
Glu	Ala	Leu	Ser	Ser	Asp	Pro	Ser	Tyr	Asn	Lys	Glu	Lys	His
	370				375						380		
His	Pro	Thr	Gln	Lys	Ser	Lys	Ala	Ser	Gln	Gly	Ser	Asp	Leu
	385				390					395			400
Asn	Glu	Ala	Ser	Arg	Lys	Asn	Lys	Lys	Lys	Glu	Lys	Ser	Thr
			405					410					415
Lys	Tyr	Glu	Val	Leu	Thr	Val	Gln	Glu	Pro	Pro	Arg	Ile	Glu
		420						425					430
Glu	Glu	Phe	Pro	Asn	Leu	Ala	Val	Ala	Ser	Glu	Arg	Arg	Asp
	435					440					445		
Glu	Thr	Pro	Lys	Phe	Gln	Ser	Lys	Gln	Gln	Pro	Gln	Asp	Asn
	450					455				460			
Asn	Asn	Val	Lys	Lys	Ser	Gln	Leu	Pro	Val	Gln	Leu	Asp	Leu
	465				470				475				480
Met	Leu	Thr	Ala	Leu	Glu	Lys	Lys	Gln	His	Ser	Gln	His	Ala
			485					490					495
Ser	Ser	Lys	Pro	Val	Val	Val	Ser	Val	Gly	Ala	Val	Pro	Val
		500						505				510	
Lys	Glu	Cys	Ala	Ser	Gly	Glu	Arg	Gly	Arg	Arg	Met	Ser	Gln
		515					520					525	
Thr	Pro	His	Asn	Pro	Leu	Asp	Ser	Ser	Ala	Pro	Leu	Met	Lys
	530					535					540		
Lys	Gln	Arg	Glu	Ile	Pro	Lys	Ala	Lys	Lys	Pro	Thr	Ser	Leu
	545				550					555			560
Ile	Ile	Leu	Lys	Glu	Arg	Gln	Glu	Arg	Lys	Gln	Arg	Leu	Gln
			565					570					575
Ala	Val	Ser	Pro	Ala	Phe	Thr	Ser	Asp	Asp	Thr	Gln	Asp	Gly
			580					585				590	
Gly	Gly	Asp	Asp	Gln	Phe	Pro	Glu	Gln	Ala	Glu	Leu	Ser	Gly
		595					600				605		
Gly	Met	Asp	Glu	Leu	Ile	Ser	Thr	Pro	Ser	Val	Glu	Asp	Lys
	610					615					620		
Glu	Pro	Pro	Gly	Thr	Glu	Leu	Gln	Arg	Asp	Thr	Glu	Ala	Ser
	625				630				635				640
Ala	Pro	Asn	His	Thr	Thr	Phe	Pro	Lys	Ile	His	Ser	Arg	Arg
			645					650					655
Asp	Tyr	Cys	Ser	Gln	Met	Leu	Ser	Lys	Glu	Val	Asp	Ala	Cys
												Val	Thr

660	665	670
Asp Leu Leu Lys Glu Leu Val Arg Phe Gln Asp Arg Met Tyr Gln Lys		
675	680	685
Asp Pro Val Lys Ala Lys Thr Lys Arg Arg Leu Val Leu Gly Leu Arg		
690	695	700
Glu Val Leu Lys His Leu Lys Leu Lys Lys Leu Lys Cys Val Ile Ile		
705	710	715
Ser Pro Asn Cys Glu Lys Ile Gln Ser Lys Gly Gly Leu Asp Asp Thr		
725	730	735
Leu His Thr Ile Ile Asp Tyr Ala Cys Glu Gln Asn Ile Pro Phe Val		
740	745	750
Phe Ala Leu Asn Arg Lys Ala Leu Gly Arg Ser Leu Asn Lys Ala Val		
755	760	765
Pro Val Ser Val Val Gly Ile Phe Ser Tyr Asp Gly Ala Gln Asp Gln		
770	775	780
Phe His Lys Met Val Glu Leu Thr Val Ala Ala Arg Gln Ala Tyr Lys		
785	790	795
Thr Met Leu Glu Asn Val Gln Gln Glu Leu Val Gly Glu Pro Ser Leu		
805	810	815
Arg His Leu Pro Ala Tyr Pro His Arg Ala Pro Ala Ala Leu Gln Lys		
820	825	830
Met Ala Pro Gln Pro Val Lys Glu Lys Glu Glu Pro His Tyr Ile Glu		
835	840	845
Ile Trp Lys Lys His Leu Glu Ala Tyr Ser Gly Cys Thr Leu Glu Leu		
850	855	860
Glu Glu Ser Leu Glu Ala Ser Thr Ser Gln Met Met Asn Leu Asn Leu		
865	870	875
		880

<210> 3535
 <211> 256
 <212> PRT
 <213> Homo sapiens

<400> 3535

Leu Phe Gln Phe Gln Val Cys Arg Ser Val Leu Ser Pro Arg Ala Ala	
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Gly Cys Thr Trp Ser Leu Ala Pro Arg Ser Arg Gly Ala Ala Gly Ser	
20 25 30	
Pro Arg Arg Tyr Arg Gly Pro Gln Pro Gln Pro Ala Pro Pro Ser Ala	
35 40 45	
Leu Pro Asn Ser Arg Pro Ser Pro Val Ala Ser Gly Arg Glu Met Val	
50 55 60	
Val Leu Ser Val Pro Ala Glu Val Thr Val Ile Leu Leu Asp Ile Glu	
65 70 75 80	
Gly Thr Thr Thr Pro Ile Ala Phe Val Lys Asp Ile Leu Phe Pro Tyr	
85 90 95	
Ile Glu Glu Asn Val Lys Glu Tyr Leu Gln Thr His Trp Glu Glu Glu	
100 105 110	
Glu Cys Gln Gln Asp Val Ser Leu Leu Arg Lys Gln Val Phe Ala Asp	
115 120 125	
Val Val Pro Ala Val Arg Lys Trp Arg Glu Ala Gly Met Lys Val Tyr	
130 135 140	
Ile Tyr Ser Ser Gly Ser Val Glu Ala Gln Lys Leu Leu Phe Gly His	
145 150 155 160	
Ser Thr Glu Gly Asp Ile Leu Glu Leu Val Asp Gly His Phe Asp Thr	
165 170 175	
Lys Ile Gly His Lys Val Glu Ser Glu Ser Tyr Arg Lys Ile Ala Asp	
180 185 190	
Ser Ile Gly Cys Ser Thr Asn Asn Ile Leu Phe Leu Thr Asp Val Thr	


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<210> 3536
<211> 434
<212> PRT
<213> Homo sapiens
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5291

370	375	380
Met Lys Glu Ala Ala Cys Ser Ser Gly Val Leu Leu Glu Val Lys His		
385	390	395
Ser Gly Ser Cys Asn Ser Ile Ser Glu Asp Thr Glu Glu Glu Glu Glu		400
	405	410
Asp Glu Asp Gln Asp Tyr Ser Phe Pro Ile Ser Ser Ile Leu Glu Trp		415
	420	425
		430
		432

<210> 3537
 <211> 613
 <212> PRT
 <213> Homo sapiens

<400> 3537

Ile Gly Leu Phe Leu Gln Val Ala Pro Leu Ser Val Met Ala Lys Ser	
1 5 10 15	
Cys Pro Ser Val Cys Arg Cys Asp Ala Gly Phe Ile Tyr Cys Asn Asp	
20 25 30	
Arg Phe Leu Thr Ser Ile Pro Thr Gly Ile Pro Glu Asp Ala Thr Thr	
35 40 45	
Leu Tyr Leu Gln Asn Asn Gln Ile Asn Asn Ala Gly Ile Pro Ser Asp	
50 55 60	
Leu Lys Asn Leu Leu Lys Val Glu Arg Ile Tyr Leu Tyr His Asn Ser	
65 70 75 80	
Leu Asp Glu Phe Pro Thr Asn Leu Pro Lys Tyr Val Lys Glu Leu His	
85 90 95	
Leu Gln Glu Asn Asn Ile Arg Thr Ile Thr Tyr Asp Ser Leu Ser Lys	
100 105 110	
Ile Pro Tyr Leu Glu Glu Leu His Leu Asp Asp Asn Ser Val Ser Ala	
115 120 125	
Val Ser Ile Glu Glu Gly Ala Phe Arg Asp Ser Asn Tyr Leu Arg Leu	
130 135 140	
Leu Phe Leu Ser Arg Asn His Leu Ser Thr Ile Pro Trp Gly Leu Pro	
145 150 155 160	
Arg Thr Ile Glu Glu Leu Arg Leu Asp Asp Asn Arg Ile Ser Thr Ile	
165 170 175	
Ser Ser Pro Ser Leu Gln Gly Leu Thr Ser Leu Lys Arg Leu Val Leu	
180 185 190	
Asp Gly Asn Leu Leu Asn Asn His Gly Leu Gly Asp Lys Val Phe Phe	
195 200 205	
Asn Leu Val Asn Leu Thr Glu Leu Ser Leu Val Arg Asn Ser Leu Thr	
210 215 220	
Ala Ala Pro Val Asn Leu Pro Gly Thr Asn Leu Arg Lys Leu Tyr Leu	
225 230 235 240	
Gln Asp Asn His Ile Asn Arg Val Pro Pro Asn Ala Phe Ser Tyr Leu	
245 250 255	
Arg Gln Leu Tyr Arg Leu Asp Met Ser Asn Asn Asn Leu Ser Asn Leu	
260 265 270	
Pro Gln Gly Ile Phe Asp Asp Leu Asp Asn Ile Thr Gln Leu Ile Leu	
275 280 285	
Arg Asn Asn Pro Trp Tyr Cys Gly Cys Lys Met Lys Trp Val Arg Asp	
290 295 300	
Trp Leu Gln Ser Leu Pro Val Lys Val Asn Val Arg Gly Leu Met Cys	
305 310 315 320	
Gln Ala Pro Glu Lys Val Arg Gly Met Ala Ile Lys Asp Leu Asn Ala	
325 330 335	
Glu Leu Phe Asp Cys Lys Asp Ser Gly Ile Val Ser Thr Ile Gln Ile	
340 345 350	
Thr Thr Ala Ile Pro Asn Thr Val Tyr Pro Ala Gln Gly Gln Trp Pro	

355	Ala	Pro	Val	Thr	Lys	Gln	Pro	Asp	Ile	Lys	Asn	Pro	Lys	Leu	Thr	Lys
370	Asp	His	Gln	Thr	Thr	Gly	Ser	Pro	Ser	Arg	Lys	Thr	Ile	Thr	Ile	Thr
385	Val	Lys	Ser	Val	Thr	Ser	Asp	Thr	Ile	His	Ile	Ser	Trp	Lys	Leu	Ala
405	Leu	Pro	Met	Thr	Ala	Leu	Arg	Leu	Ser	Trp	Leu	Lys	Leu	Gly	His	Ser
420	Pro	Ala	Phe	Gly	Ser	Ile	Thr	Glu	Thr	Ile	Val	Thr	Gly	Glu	Arg	Ser
435	Glu	Tyr	Leu	Val	Thr	Ala	Leu	Glu	Pro	Asp	Ser	Pro	Tyr	Lys	Val	Cys
450	Met	Val	Pro	Met	Glu	Thr	Ser	Asn	Leu	Tyr	Leu	Phe	Asp	Glu	Thr	Pro
465	Val	Cys	Ile	Glu	Thr	Glu	Thr	Ala	Pro	Leu	Arg	Met	Tyr	Asn	Pro	Thr
485	Thr	Thr	Leu	Asn	Arg	Glu	Gln	Glu	Lys	Glu	Pro	Tyr	Lys	Asn	Pro	Asn
500	Leu	Pro	Leu	Ala	Ala	Ile	Ile	Gly	Gly	Ala	Val	Ala	Leu	Val	Thr	Ile
515	Ala	Leu	Leu	Ala	Leu	Val	Cys	Trp	Tyr	Val	His	Arg	Asn	Gly	Ser	Leu
530	Phe	Ser	Arg	Asn	Cys	Ala	Tyr	Ser	Lys	Gly	Arg	Arg	Arg	Lys	Asp	Asp
545	Tyr	Ala	Glu	Ala	Gly	Thr	Lys	Lys	Asp	Asn	Ser	Ile	Leu	Glu	Ile	Arg
565	Glu	Thr	Ser	Phe	Gln	Met	Leu	Pro	Ile	Ser	Asn	Glu	Pro	Ile	Ser	Lys
580	Glu	Glu	Phe	Val	Ile	His	Thr	Ile	Phe	Pro	Pro	Asn	Gly	Met	Asn	Leu
595	Tyr	Lys	Asn	Asn	His											
610																
613																

<210> 3538

<211> 1773

<212> PRT

<213> Homo sapiens

<400> 3538

Trp	Asn	Val	Lys	Pro	Ser	Leu	Leu	Val	Val	Gln	Leu	Phe	Lys	Phe	Ser
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Asp	Lys	Glu	Glu	His	Glu	Gln	Asn	Asp	Ser	Ile	Ser	Gly	Lys	Thr	Gly
		20					25						30		
Glu	Thr	Gly	Val	Glu	Glu	Met	Ile	Ala	Thr	Arg	Lys	Val	Glu	Gln	Asp
		35				40						45			
Ser	Lys	Glu	Thr	Val	Lys	Leu	Ser	His	Glu	Asp	Asp	His	Ile	Leu	Glu
		50			55					60					
Asp	Ala	Gly	Ser	Ser	Asp	Ile	Ser	Ser	Asp	Ala	Ala	Cys	Thr	Asn	Pro
		65			70				75					80	
Asn	Lys	Thr	Glu	Asn	Ser	Leu	Val	Gly	Leu	Pro	Ser	Cys	Val	Asp	Glu
			85					90						95	
Val	Thr	Glu	Cys	Asn	Leu	Glu	Leu	Lys	Asp	Thr	Met	Gly	Ile	Ala	Asp
		100					105					110			
Lys	Thr	Glu	Asn	Thr	Leu	Glu	Arg	Asn	Lys	Ile	Glu	Pro	Leu	Gly	Tyr
		115				120					125				
Cys	Glu	Asp	Ala	Glu	Ser	Asn	Arg	Gln	Leu	Glu	Ser	Thr	Glu	Phe	Asn
		130				135				140					
Lys	Ser	Asn	Leu	Glu	Val	Val	Asp	Thr	Ser	Thr	Phe	Gly	Pro	Glu	Ser
		145			150				155					160	
Asn	Ile	Leu	Glu	Asn	Ala	Ile	Cys	Asp	Val	Pro	Asp	Gln	Asn	Ser	Lys

										165											170											175
Gln	Leu	Asn	Ala	Ile	Glu	Ser	Thr	Lys	Ile	Glu	Ser	His	Glu	Thr	Ala																	
										180											185											190
Asn	Leu	Gln	Asp	Asp	Arg	Asn	Ser	Gln	Ser	Ser	Ser	Val	Ser	Tyr	Leu																	
										195											200											205
Glu	Ser	Lys	Ser	Val	Lys	Ser	Lys	His	Thr	Lys	Pro	Val	Ile	His	Ser																	
										210											215											220
Lys	Gln	Asn	Met	Thr	Thr	Asp	Ala	Pro	Lys	Lys	Ile	Val	Ala	Ala	Lys																	
										225											230											235
Tyr	Glu	Val	Ile	His	Ser	Lys	Thr	Lys	Val	Asn	Val	Lys	Ser	Val	Lys																	
										245											250											255
Arg	Asn	Thr	Asp	Val	Pro	Glu	Ser	Gln	Gln	Asn	Phe	His	Arg	Pro	Val																	
										260											265											270
Lys	Val	Arg	Lys	Lys	Gln	Ile	Asp	Lys	Glu	Pro	Lys	Ile	Gln	Ser	Cys																	
										275											280											285
Asn	Ser	Gly	Val	Lys	Ser	Val	Lys	Asn	Gln	Ala	His	Ser	Val	Leu	Lys																	
										290											295											300
Lys	Thr	Leu	Gln	Asp	Gln	Thr	Leu	Val	Gln	Ile	Phe	Lys	Pro	Leu	Thr																	
										305											310											315
His	Ser	Leu	Ser	Asp	Lys	Ser	His	Ala	His	Pro	Gly	Cys	Leu	Lys	Glu																	
										325											330											335
Pro	His	His	Pro	Ala	Gln	Thr	Gly	His	Val	Ser	His	Ser	Ser	Gln	Lys																	
										340											345											350
Gln	Cys	His	Lys	Pro	Gln	Gln	Gln	Ala	Pro	Ala	Met	Lys	Thr	Asn	Ser																	
										355											360											365
His	Val	Lys	Glu	Glu	Leu	Glu	His	Pro	Gly	Val	Glu	His	Phe	Lys	Glu																	
										370											375											380
Glu	Asp	Lys	Leu	Lys	Leu	Lys	Lys	Pro	Glu	Lys	Asn	Leu	Gln	Pro	Arg																	
										385											390											395
Gln	Arg	Arg	Ser	Ser	Lys	Ser	Phe	Ser	Leu	Asp	Glu	Pro	Pro	Leu	Phe																	
										405											410											415
Ile	Pro	Asp	Asn	Ile	Ala	Thr	Ile	Arg	Arg	Glu	Gly	Ser	Asp	His	Ser																	
										420											425											430
Ser	Ser	Phe	Glu	Ser	Lys	Tyr	Met	Trp	Thr	Pro	Ser	Lys	Gln	Cys	Gly																	
										435											440											445
Phe	Cys	Lys	Lys	Pro	His	Gly	Asn	Arg	Phe	Met	Val	Gly	Cys	Gly	Arg																	
										450											455											460
Cys	Asp	Asp	Trp	Phe	His	Gly	Asp	Cys	Val	Gly	Leu	Ser	Leu	Ser	Gln																	
										465											470											475
Ala	Gln	Gln	Met	Gly	Glu	Glu	Asp	Lys	Glu	Tyr	Val	Cys	Val	Lys	Cys																	
										485											490											495
Cys	Ala	Glu	Glu	Asp	Lys	Lys	Thr	Glu	Ile	Leu	Asp	Pro	Asp	Thr	Leu																	
										500											505											510
Glu	Asn	Gln	Ala	Thr	Val	Glu	Phe	His	Ser	Gly	Asp	Lys	Thr	Met	Glu																	
										515											520											525
Cys	Glu	Lys	Leu	Gly	Leu	Ser	Lys	His	Thr	Thr	Asn	Asp	Arg	Thr	Lys																	
										530											535											540
Tyr	Ile	Asp	Asp	Thr	Val	Lys	His	Lys	Val	Lys	Ile	Leu	Lys	Arg	Glu																	
										545											550											555
Ser	Gly	Glu	Gly	Arg	Asn	Ser	Ser	Asp	Cys	Arg	Asp	Asn	Glu	Ile	Lys																	
										565											570											575
Lys	Trp	Gln	Leu	Ala	Pro	Leu	Arg	Lys	Met	Gly	Gln	Pro	Val	Leu	Pro																	
										580											585											590
Arg	Arg	Ser	Ser	Glu	Glu	Lys	Ser	Glu	Lys	Ile	Pro	Lys	Glu	Ser	Thr																	
										595											600											605
Thr	Val	Thr	Cys	Thr	Gly	Glu	Lys	Ala	Ser	Lys	Pro	Gly	Thr	His	Glu																	
										610											615											620
Lys	Gln	Glu	Met	Lys	Lys	Lys	Lys	Val	Glu	Lys	Gly	Val	Leu	Asn	Val																	
										625											630											635
His	Pro	Ala	Ala	Ser	Ala	Ser	Lys	Pro	Ser	Ala	Asp	Gln	Ile	Arg	Gln																	
										645											650											655
Ser	Val	Arg	His	Ser	Leu	Lys	Asp	Ile	Leu	Met	Lys	Arg	Leu	Thr	Asp																	
										660											665											670
Ser	Asn	Leu	Lys	Val	Pro	Glu	Glu	Lys	Ala	Ala	Lys	Val	Ala	Thr	Lys																	

675	680	685
Ile Glu Lys Glu Leu Phe Ser	Phe Phe Arg Asp Thr	Asp Ala Lys Tyr
690	695	700
Lys Asn Lys Tyr Arg Ser Leu Met	Phe Asn Leu Lys Asp	Pro Lys Asn
705	710	715
Asn Ile Leu Phe Lys Lys Val Leu Lys Gly	Glu Val Thr Pro Asp His	720
725	730	735
Leu Ile Arg Met Ser Pro Glu Glu Leu Ala Ser	Lys Glu Leu Ala Ala	
740	745	750
Trp Arg Arg Arg Glu Asn Arg His Thr Ile Glu Met	Ile Glu Lys Glu	
755	760	765
Gln Arg Glu Val Glu Arg Arg Pro Ile Thr Lys Ile Thr His Lys Gly		
770	775	780
Glu Ile Glu Ile Glu Ser Asp Ala Pro Met Lys Glu Gln Glu Ala Ala		800
785	790	795
Met Glu Ile Gln Glu Pro Ala Ala Asn Lys Ser Leu Glu Lys Pro Glu		815
805	810	815
Gly Ser Glu Lys Arg Lys Glu Glu Val Asp Ser Met Ser Lys Asp Thr		830
820	825	830
Thr Ser Gln His Arg Gln His Leu Phe Asp Leu Asn Cys Lys Ile Cys		845
835	840	845
Ile Gly Arg Met Ala Pro Pro Val Asp Asp Leu Ser Pro Lys Lys Val		
850	855	860
Lys Val Val Val Gly Val Ala Arg Lys His Ser Asp Asn Glu Ala Glu		880
865	870	875
Ser Ile Ala Asp Ala Leu Ser Ser Thr Ser Asn Ile Leu Ala Ser Glu		895
885	890	895
Phe Phe Glu Glu Lys Lys Gln Glu Ser Pro Lys Ser Thr Phe Ser Pro		910
900	905	910
Ala Pro Arg Pro Glu Met Pro Gly Thr Val Glu Val Glu Ser Thr Phe		925
915	920	925
Leu Ala Arg Leu Asn Phe Ile Trp Lys Gly Phe Ile Asn Met Pro Ser		
930	935	940
Val Ala Lys Phe Val Thr Lys Ala Tyr Pro Val Ser Gly Ser Pro Glu		960
945	950	955
Tyr Leu Thr Glu Asp Leu Pro Asp Ser Ile Gln Val Gly Gly Arg Ile		975
965	970	975
Ser Pro Gln Thr Val Trp Asp Tyr Val Glu Lys Ile Lys Ala Ser Gly		990
980	985	990
Thr Lys Glu Ile Cys Val Val Arg Phe Thr Pro Val Thr Glu Glu Asp		1005
995	1000	1005
Gln Ile Ser Tyr Thr Leu Leu Phe Ala Tyr Phe Ser Ser Arg Lys Arg		
1010	1015	1020
Tyr Gly Val Ala Ala Asn Asn Met Lys Gln Val Lys Asp Met Tyr Leu		1040
1025	1030	1035
Ile Pro Leu Gly Ala Thr Asp Lys Ile Pro His Pro Leu Val Pro Phe		1055
1045	1050	1055
Asp Gly Pro Gly Leu Glu Leu His Arg Pro Asn Leu Leu Gly Leu		1070
1060	1065	1070
Ile Ile Arg Gln Lys Leu Lys Arg Gln His Ser Ala Cys Ala Ser Thr		
1075	1080	1085
Ser His Ile Ala Glu Thr Pro Glu Ser Ala Pro Pro Ile Ala Leu Pro		
1090	1095	1100
Pro Asp Lys Lys Ser Lys Ile Glu Val Ser Thr Glu Glu Ala Pro Glu		1120
1105	1110	1115
Glu Glu Asn Asp Phe Phe Asn Ser Phe Thr Thr Val Leu His Lys Gln		
1125	1130	1135
Arg Asn Lys Pro Gln Gln Asn Leu Gln Glu Asp Leu Pro Thr Ala Val		
1140	1145	1150
Glu Pro Leu Met Glu Val Thr Lys Gln Glu Pro Pro Lys Pro Leu Arg		
1155	1160	1165
Phe Leu Pro Gly Val Leu Ile Gly Trp Glu Asn Gln Pro Thr Thr Leu		
1170	1175	1180
Glu Leu Ala Asn Lys Pro Leu Pro Val Asp Asp Ile Leu Gln Ser Leu		

1185 1190 1195 1200
 Leu Gly Thr Thr Gly Gln Val Tyr Asp Gln Ala Gln Ser Val Met Glu
 1205 1210 1215
 Gln Asn Thr Val Lys Glu Ile Pro Phe Leu Asn Glu Gln Thr Asn Ser
 1220 1225 1230
 Lys Ile Glu Lys Thr Asp Asn Val Glu Val Thr Asp Gly Glu Asn Lys
 1235 1240 1245
 Glu Ile Lys Val Lys Val Asp Asn Ile Ser Glu Ser Thr Asp Lys Ser
 1250 1255 1260
 Ala Glu Ile Glu Thr Ser Val Val Gly Ser Ser Ser Ile Ser Ala Gly
 1265 1270 1275 1280
 Ser Leu Thr Ser Leu Ser Leu Arg Gly Lys Pro Pro Asp Val Ser Thr
 1285 1290 1295
 Glu Ala Phe Leu Thr Asn Leu Ser Ile Gln Ser Lys Gln Glu Glu Thr
 1300 1305 1310
 Val Glu Ser Lys Glu Lys Thr Leu Lys Arg Gln Leu Gln Glu Asp Gln
 1315 1320 1325
 Glu Asn Asn Leu Gln Asp Asn Gln Thr Ser Asn Ser Ser Pro Cys Arg
 1330 1335 1340
 Ser Asn Val Gly Lys Gly Asn Ile Asp Gly Asn Val Ser Cys Ser Glu
 1345 1350 1355 1360
 Asn Leu Val Ala Asn Thr Ala Arg Ser Pro Gln Phe Ile Asn Leu Lys
 1365 1370 1375
 Arg Asp Pro Arg Gln Ala Ala Gly Arg Ser Gln Pro Val Thr Thr Ser
 1380 1385 1390
 Glu Ser Lys Asp Gly Asp Ser Cys Arg Asn Gly Glu Lys His Met Leu
 1395 1400 1405
 Pro Gly Leu Ser His Asn Lys Glu His Leu Thr Glu Gln Ile Asn Val
 1410 1415 1420
 Glu Glu Lys Leu Cys Ser Ala Glu Lys Asn Ser Cys Val Gln Gln Ser
 1425 1430 1435 1440
 Asp Asn Leu Lys Val Ala Gln Asn Ser Pro Ser Val Glu Asn Ile Gln
 1445 1450 1455
 Thr Ser Gln Ala Glu Gln Ala Lys Pro Leu Gln Glu Asp Ile Leu Met
 1460 1465 1470
 Gln Asn Ile Glu Thr Val His Pro Phe Arg Arg Gly Ser Ala Val Ala
 1475 1480 1485
 Thr Ser His Phe Glu Val Gly Asn Thr Cys Pro Ser Glu Phe Pro Ser
 1490 1495 1500
 Lys Ser Ile Thr Phe Thr Ser Arg Ser Thr Ser Pro Arg Thr Ser Thr
 1505 1510 1515 1520
 Asn Phe Ser Pro Met Arg Pro Gln Gln Pro Asn Leu Gln His Leu Lys
 1525 1530 1535
 Ser Ser Pro Pro Gly Phe Pro Phe Pro Gly Pro Pro Asn Phe Pro Pro
 1540 1545 1550
 Gln Ser Met Phe Gly Phe Pro Pro His Leu Pro Pro Pro Leu Leu Pro
 1555 1560 1565
 Pro Pro Gly Phe Gly Phe Ala Gln Asn Pro Met Val Pro Trp Pro Pro
 1570 1575 1580
 Val Val His Leu Pro Gly Gln Pro Gln Arg Met Met Gly Pro Leu Ser
 1585 1590 1595 1600
 Gln Ala Ser Arg Tyr Ile Gly Pro Gln Asn Phe Tyr Gln Val Lys Asp
 1605 1610 1615
 Ile Arg Arg Pro Glu Arg Arg His Ser Asp Pro Trp Gly Arg Gln Asp
 1620 1625 1630
 Gln Gln Gln Leu Asp Arg Pro Phe Asn Arg Gly Lys Gly Asp Arg Gln
 1635 1640 1645
 Arg Phe Tyr Ser Asp Ser His His Leu Lys Arg Glu Arg His Glu Lys
 1650 1655 1660
 Glu Trp Glu Gln Glu Ser Glu Arg His Arg Arg Asp Arg Ser Gln
 1665 1670 1675 1680
 Asp Lys Asp Arg Asp Arg Lys Ser Arg Glu Glu Gly His Lys Asp Lys
 1685 1690 1695
 Glu Arg Ala Arg Leu Ser His Gly Asp Arg Gly Thr Asp Gly Lys Ala

1700 1705 1710
 Ser Arg Asp Ser Arg Asn Val Asp Lys Lys Pro Asp Lys Pro Lys Ser
 1715 1720 1725
 Glu Asp Tyr Glu Lys Asp Lys Glu Arg Glu Lys Ser Lys His Arg Glu
 1730 1735 1740
 Gly Glu Lys Asp Arg Asp Arg Tyr His Lys Asp Arg Asp His Thr Asp
 1745 1750 1755 1760
 Arg Thr Lys Ser Lys Arg
 1765 1766

<210> 3539
 <211> 538
 <212> PRT
 <213> Homo sapiens

<400> 3539
 Gly Ser Trp Thr Val Glu Leu Ser Leu Lys Pro Ser Ala Ser Pro Ser
 1 5 10 15
 Leu Lys Trp Val Cys Leu Pro Gly Ala Ala Val Asn Lys His Arg
 20 25 30
 Ser Gly Ala Gly Gly Leu Ile Arg Ser Leu Ile Gln Cys Thr Trp Ala
 35 40 45
 Pro Ala Gly Pro Ala Arg Arg Gly Gly Arg Gly Ile Glu Asp Phe Pro
 50 55 60
 Tyr Leu Phe Phe Gln Leu Thr His Cys Gln Gln Arg Ile Cys Ser Val
 65 70 75 80
 Thr Gln Ala Gly Val Gln Trp Cys Asp His Ser Ser Leu Gln Pro Gln
 85 90 95
 Thr Pro Gly Leu Asn Gln Ser Ser His Leu Ser Leu Leu Ser Ser Arg
 100 105 110
 Asp Tyr Arg Met Leu Ser Ser Phe Asn Glu Trp Phe Trp Gln Asp Arg
 115 120 125
 Phe Trp Leu Pro Pro Asn Val Thr Trp Thr Glu Leu Glu Asp Arg Asp
 130 135 140
 Gly Arg Val Tyr Pro His Pro Gln Asp Leu Leu Ala Ala Leu Pro Leu
 145 150 155 160
 Ala Leu Val Leu Leu Ala Met Arg Leu Ala Phe Glu Arg Phe Ile Gly
 165 170 175
 Leu Pro Leu Ser Arg Trp Leu Gly Val Arg Asp Gln Thr Arg Arg Gln
 180 185 190
 Val Lys Pro Asn Ala Thr Leu Glu Lys His Phe Leu Thr Glu Gly His
 195 200 205
 Arg Pro Lys Glu Pro Gln Leu Ser Leu Leu Ala Ala Gln Cys Gly Leu
 210 215 220
 Thr Leu Gln Gln Thr Gln Arg Trp Phe Arg Arg Arg Asn Gln Asp
 225 230 235 240
 Arg Pro Gln Leu Thr Lys Lys Phe Cys Glu Ala Ser Trp Arg Phe Leu
 245 250 255
 Phe Tyr Leu Ser Ser Phe Val Gly Gly Leu Ser Val Leu Tyr His Glu
 260 265 270
 Ser Trp Leu Trp Ala Pro Val Met Cys Trp Asp Arg Tyr Pro Asn Gln
 275 280 285
 Leu Thr Leu Ser Cys Pro Ala Ala Asp Ser Glu Ala Ser Leu Tyr Trp
 290 295 300
 Trp Tyr Leu Leu Glu Leu Gly Phe Tyr Leu Ser Leu Leu Ile Arg Leu
 305 310 315 320
 Pro Phe Asp Val Lys Arg Lys Gly Gly Gly Pro Ser Ser Ile Lys Pro
 325 330 335
 Arg Pro His Tyr Asp Pro Pro Ser Thr Ala Asp Phe Lys Glu Gln Val
 340 345 350
 Ile His His Phe Val Ala Val Ile Leu Met Thr Phe Ser Tyr Ser Ala

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      355      360      365
Asn Leu Leu Arg Ile Gly Ser Leu Val Leu Leu Leu His Asp Ser Ser
 370      375      380
Asp Tyr Leu Leu Glu Ala Cys Lys Met Val Asn Tyr Met Gln Tyr Gln
 385      390      395      400
Gln Val Cys Asp Ala Leu Phe Leu Ile Phe Ser Phe Val Phe Phe Tyr
      405      410      415
Thr Arg Leu Val Leu Phe Pro Thr Gln Ile Leu Tyr Thr Thr Tyr Tyr
      420      425      430
Glu Ser Ile Ser Asn Arg Gly Pro Phe Phe Gly Tyr Tyr Phe Phe Asn
      435      440      445
Gly Leu Leu Met Leu Leu Gln Leu Leu His Val Phe Trp Ser Cys Leu
      450      455      460
Ile Leu Arg Met Leu Tyr Ser Phe Met Lys Lys Gly Gln Met Glu Lys
 465      470      475      480
Asp Ile Arg Ser Asp Val Glu Glu Ser Asp Ser Ser Glu Glu Ala Ala
      485      490      495
Ala Ala Gln Glu Pro Leu Gln Leu Lys Asn Gly Thr Ala Gly Gly Pro
      500      505      510
Arg Pro Ala Pro Thr Asp Gly Pro Arg Ser Arg Val Ala Gly Arg Leu
      515      520      525
Thr Asn Arg His Thr Thr Ala Thr
      530      535 536

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<210> 3540
 <211> 378
 <212> PRT
 <213> Homo sapiens

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      <400> 3540
Ser Pro Ala Gly Tyr Cys His Ser Gly Leu Leu Pro Gly Cys Ser Arg
 1      5      10      15
Ser Ala Cys Ala Asp Leu Ala Lys His Gln Glu Leu Pro Gly Lys Lys
      20      25      30
Leu Leu Ser Glu Lys Lys Leu Lys Arg Tyr Phe Val Asp Tyr Arg Arg
      35      40      45
Val Leu Val Cys Gly Gly Asn Gly Gly Ala Gly Ala Ser Cys Phe His
      50      55      60
Ser Glu Pro Arg Lys Glu Phe Gly Gly Pro Asp Gly Gly Asp Gly Gly
      65      70      75      80
Asn Gly Gly His Val Ile Leu Arg Val Asp Gln Gln Val Lys Ser Leu
      85      90      95
Ser Ser Val Leu Ser Arg Tyr Gln Gly Phe Ser Gly Glu Asp Gly Gly
      100      105      110
Ser Lys Asn Cys Phe Gly Arg Ser Gly Ala Val Leu Tyr Ile Arg Val
      115      120      125
Pro Val Gly Thr Leu Val Lys Glu Gly Gly Arg Val Val Ala Asp Leu
      130      135      140
Ser Cys Val Gly Asp Glu Tyr Ile Ala Ala Leu Gly Gly Ala Gly Gly
      145      150      155      160
Lys Gly Asn Arg Phe Phe Leu Ala Asn Asn Asn Arg Ala Pro Val Thr
      165      170      175
Cys Thr Pro Gly Gln Pro Gly Gln Gln Arg Val Leu His Leu Glu Leu
      180      185      190
Lys Thr Val Ala His Ala Gly Met Val Gly Phe Pro Asn Ala Gly Lys
      195      200      205
Ser Ser Leu Leu Arg Ala Ile Ser Asn Ala Arg Pro Ala Val Ala Ser
      210      215      220
Tyr Pro Phe Thr Thr Leu Lys Pro His Val Gly Ile Val His Tyr Glu
      225      230      235      240
Gly His Leu Gln Ile Ala Val Ala Asp Ile Pro Gly Ile Ile Arg Gly

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				245					250					255	
Ala	His	Gln	Asn	Arg	Gly	Leu	Gly	Ser	Ala	Phe	Leu	Arg	His	Ile	Glu
			260					265					270		
Arg	Cys	Arg	Phe	Leu	Leu	Phe	Val	Val	Asp	Leu	Ser	Gln	Pro	Glu	Pro
		275					280					285			
Trp	Thr	Gln	Val	Asp	Asp	Leu	Lys	Tyr	Glu	Leu	Glu	Met	Tyr	Glu	Lys
	290					295					300				
Gly	Leu	Ser	Ala	Arg	Pro	His	Ala	Ile	Val	Ala	Asn	Lys	Ile	Asp	Leu
305					310					315				320	
Pro	Glu	Ala	Gln	Ala	Asn	Leu	Ser	Gln	Leu	Arg	Asp	His	Leu	Gly	Gln
			325						330				335		
Glu	Val	Ile	Val	Leu	Ser	Ala	Leu	Thr	Gly	Glu	Asn	Leu	Glu	Gln	Leu
			340					345				350			
Leu	Leu	His	Leu	Lys	Val	Leu	Tyr	Asp	Ala	Tyr	Ala	Glu	Ala	Glu	Leu
		355				360					365				
Gly	Gln	Gly	Arg	Gln	Pro	Leu	Arg	Trp							
	370					375		377							

<210> 3541
 <211> 2669
 <212> PRT
 <213> Homo sapiens

<400> 3541

Asp	Thr	Gln	Val	Ser	Glu	Thr	Leu	Lys	Arg	Phe	Ala	Gly	Lys	Val	Thr
1				5					10					15	
Thr	Ala	Ser	Val	Lys	Glu	Arg	Arg	Glu	Ile	Leu	Ser	Glu	Leu	Gly	Lys
			20					25					30		
Cys	Val	Ala	Gly	Lys	Asp	Leu	Pro	Glu	Gly	Ala	Val	Lys	Gly	Leu	Cys
		35					40					45			
Lys	Leu	Phe	Cys	Leu	Thr	Leu	His	Arg	Tyr	Arg	Asp	Ala	Ala	Ser	Arg
	50					55				60					
Arg	Ala	Leu	Gln	Ala	Ala	Ile	Gln	Gln	Leu	Ala	Glu	Ala	Gln	Pro	Glu
65				70					75					80	
Ala	Thr	Ala	Lys	Asn	Leu	Leu	His	Ser	Leu	Gln	Ser	Ser	Gly	Ile	Gly
			85					90					95		
Ser	Lys	Ala	Gly	Val	Pro	Ser	Lys	Ser	Ser	Gly	Ser	Ala	Ala	Leu	Leu
			100					105					110		
Ala	Leu	Thr	Trp	Thr	Cys	Leu	Leu	Val	Arg	Ile	Val	Phe	Pro	Ser	Arg
		115				120						125			
Ala	Lys	Arg	Gln	Gly	Asp	Ile	Trp	Asn	Lys	Leu	Val	Glu	Val	Gln	Cys
130					135					140					
Leu	Leu	Leu	Leu	Glu	Val	Leu	Gly	Gly	Ser	His	Lys	His	Ala	Val	Asp
145					150					155				160	
Gly	Ala	Val	Lys	Lys	Leu	Thr	Lys	Leu	Trp	Lys	Glu	Asn	Pro	Gly	Leu
			165					170					175		
Val	Glu	Gln	Tyr	Leu	Ser	Ala	Ile	Leu	Ser	Leu	Glu	Pro	Asn	Gln	Asn
		180						185					190		
Tyr	Ala	Gly	Met	Leu	Gly	Leu	Leu	Val	Gln	Phe	Cys	Thr	Ser	His	Lys
	195					200						205			
Glu	Met	Asp	Val	Val	Ser	Gln	His	Lys	Ser	Ala	Leu	Leu	Asp	Phe	Tyr
210						215					220				
Met	Lys	Asn	Ile	Leu	Met	Ser	Lys	Val	Lys	Pro	Pro	Lys	Tyr	Leu	Leu
225					230					235				240	
Asp	Ser	Cys	Ala	Pro	Leu	Leu	Arg	Tyr	Leu	Ser	His	Ser	Glu	Phe	Lys
			245						250					255	
Asp	Leu	Ile	Leu	Pro	Thr	Ile	Gln	Lys	Ser	Leu	Leu	Arg	Ser	Pro	Glu
		260						265					270		
Asn	Val	Ile	Glu	Thr	Ile	Ser	Ser	Leu	Leu	Ala	Ser	Val	Thr	Leu	Asp
		275					280					285			
Leu	Ser	Gln	Tyr	Ala	Met	Asp	Ile	Val	Lys	Gly	Leu	Ala	Gly	His	Leu

290		295		300
Lys Ser Asn Ser Pro Arg Leu Met Asp Glu Ala Val Leu Ala Leu Arg				
305		310		315
Asn Leu Ala Arg Gln Cys Ser Asp Ser Ser Ala Met Glu Ser Leu Thr				320
		325		330
Lys His Leu Phe Ala Ile Leu Gly Gly Ser Glu Gly Lys Leu Thr Val				335
		340		345
Val Ala Gln Lys Met Ser Val Leu Ser Gly Ile Gly Ser Val Ser His				350
		355		360
His Val Val Ser Gly Pro Ser Ser Gln Val Leu Asn Gly Ile Val Ala				365
		370		375
Glu Leu Phe Ile Pro Phe Leu Gln Gln Glu Val His Glu Gly Thr Leu				380
385		390		395
Val His Ala Val Ser Val Leu Ala Leu Trp Cys Asn Arg Phe Thr Met				400
		405		410
Glu Val Pro Lys Lys Leu Thr Glu Trp Phe Lys Lys Ala Phe Ser Leu				415
		420		425
Lys Thr Ser Thr Ser Ala Val Arg His Ala Tyr Leu Gln Cys Met Leu				430
		435		440
Ala Ser Tyr Arg Gly Asp Thr Leu Leu Gln Ala Leu Asp Leu Leu Pro				445
		450		455
Leu Leu Ile Gln Thr Val Glu Lys Ala Ala Ser Gln Ser Thr Gln Val				460
465		470		475
Pro Thr Ile Thr Glu Gly Val Ala Ala Ala Leu Leu Leu Leu Lys Leu				480
		485		490
Ser Val Ala Asp Ser Gln Ala Glu Ala Lys Leu Ser Ser Phe Trp Gln				495
		500		505
Leu Ile Val Asp Glu Lys Lys Gln Val Phe Thr Ser Glu Lys Phe Leu				510
		515		520
Val Met Ala Ser Glu Asp Ala Leu Cys Thr Val Leu His Leu Thr Glu				525
		530		535
Arg Leu Phe Leu Asp His Pro His Arg Leu Thr Gly Asn Lys Val Gln				540
545		550		555
Gln Tyr His Arg Ala Leu Val Ala Val Leu Leu Ser Arg Thr Trp His				560
		565		570
Val Arg Arg Gln Ala Gln Gln Thr Val Arg Lys Leu Leu Ser Ser Leu				575
		580		585
Gly Gly Phe Lys Leu Ala His Gly Leu Leu Glu Glu Leu Lys Thr Val				590
		595		600
Leu Ser Ser His Lys Val Leu Pro Leu Glu Ala Leu Val Thr Asp Ala				605
		610		615
Gly Glu Val Thr Glu Ala Gly Lys Ala Tyr Val Pro Pro Arg Val Leu				620
625		630		635
Gln Glu Ala Leu Cys Val Ile Ser Gly Val Pro Gly Leu Lys Gly Asp				640
		645		650
Val Thr Asp Thr Glu Gln Leu Ala Gln Glu Met Leu Ile Ile Ser His				655
		660		665
His Pro Ser Leu Val Ala Val Gln Ser Gly Leu Trp Pro Ala Leu Leu				670
		675		680
Ala Arg Met Lys Ile Asp Pro Glu Ala Phe Ile Thr Arg His Leu Asp				685
		690		695
Gln Ile Ile Pro Arg Met Thr Thr Gln Ser Pro Leu Asn Gln Ser Ser				700
705		710		715
Met Asn Ala Met Gly Ser Leu Ser Val Leu Ser Pro Asp Arg Val Leu				720
		725		730
Pro Gln Leu Ile Ser Thr Ile Thr Ala Ser Val Gln Asn Pro Ala Leu				735
		740		745
Arg Leu Val Thr Arg Glu Glu Phe Ala Ile Met Gln Thr Pro Ala Gly				750
		755		760
Glu Leu Tyr Asp Lys Ser Ile Ile Gln Ser Ala Gln Gln Asp Ser Ile				765
		770		775
Lys Lys Ala Asn Met Lys Arg Glu Asn Lys Ala Tyr Ser Phe Lys Glu				780
785		790		795
Gln Ile Ile Glu Leu Glu Leu Lys Glu Glu Ile Lys Lys Lys Lys Gly				800

5301

1315	1320	1325
Lys Ser Asp Pro Lys Val Lys Pro Ile Val Ala Lys Leu Ile Ala Ala		
1330	1335	1340
Leu Ser Thr Pro Ser Gln Gln Val Gln Glu Ser Val Ala Ser Cys Leu		
1345	1350	1355
Pro Pro Leu Val Pro Ala Ile Lys Glu Asp Ala Gly Gly Met Ile Gln		
1365	1370	1375
Arg Leu Met Gln Gln Leu Leu Glu Ser Asp Lys Tyr Ala Glu Arg Lys		
1380	1385	1390
Gly Ala Ala Tyr Gly Leu Ala Gly Leu Val Lys Gly Leu Gly Ile Leu		
1395	1400	1405
Ser Leu Lys Gln Gln Glu Met Met Ala Ala Leu Thr Asp Ala Ile Gln		
1410	1415	1420
Asp Lys Lys Asn Phe Arg Arg Arg Glu Gly Ala Leu Phe Ala Phe Glu		
1425	1430	1435
Met Leu Cys Thr Met Leu Gly Lys Leu Phe Glu Pro Tyr Val Val His		
1445	1450	1455
Val Leu Pro His Leu Leu Leu Cys Phe Gly Asp Gly Asn Gln Tyr Val		
1460	1465	1470
Arg Glu Ala Ala Asp Asp Cys Ala Lys Ala Val Met Ser Asn Leu Ser		
1475	1480	1485
Ala His Gly Val Lys Leu Val Leu Pro Ser Leu Leu Ala Ala Leu Glu		
1490	1495	1500
Glu Glu Ser Trp Arg Thr Lys Ala Gly Ser Val Glu Leu Leu Gly Ala		
1505	1510	1515
Met Ala Tyr Cys Ala Pro Lys Gln Leu Ser Ser Cys Leu Pro Asn Ile		
1525	1530	1535
Val Pro Lys Leu Thr Glu Val Leu Thr Asp Ser His Val Lys Val Gln		
1540	1545	1550
Lys Ala Gly Gln Gln Ala Leu Arg Gln Ile Gly Ser Val Ile Arg Asn		
1555	1560	1565
Pro Glu Ile Leu Ala Ile Ala Pro Val Leu Leu Asp Ala Leu Thr Asp		
1570	1575	1580
Pro Ser Arg Lys Thr Gln Lys Cys Leu Gln Thr Leu Leu Asp Thr Lys		
1585	1590	1595
Phe Val His Phe Ile Asp Ala Pro Ser Leu Ala Leu Ile Met Pro Ile		
1605	1610	1615
Val Gln Arg Ala Phe Gln Asp Arg Ser Thr Asp Thr Arg Lys Met Ala		
1620	1625	1630
Ala Gln Ile Ile Gly Asn Met Tyr Ser Leu Thr Asp Gln Lys Asp Leu		
1635	1640	1645
Ala Pro Tyr Leu Pro Ser Val Thr Pro Gly Leu Lys Ala Ser Leu Leu		
1650	1655	1660
Asp Pro Val Pro Glu Val Arg Thr Val Ser Ala Lys Ala Leu Gly Ala		
1665	1670	1675
Met Val Lys Gly Met Gly Glu Ser Cys Phe Glu Asp Leu Leu Pro Trp		
1685	1690	1695
Leu Met Glu Thr Leu Thr Tyr Glu Gln Ser Ser Val Asp Arg Ser Gly		
1700	1705	1710
Ala Ala Gln Gly Leu Ala Glu Val Met Ala Gly Leu Gly Val Glu Lys		
1715	1720	1725
Leu Glu Lys Leu Met Pro Glu Ile Val Ala Thr Ala Ser Lys Val Asp		
1730	1735	1740
Ile Ala Pro His Val Arg Asp Gly Tyr Ile Met Met Phe Asn Tyr Leu		
1745	1750	1755
Pro Ile Thr Phe Gly Asp Lys Phe Thr Pro Tyr Val Gly Pro Ile Ile		
1765	1770	1775
Pro Cys Ile Leu Lys Ala Leu Ala Asp Glu Asn Glu Phe Val Arg Asp		
1780	1785	1790
Thr Ala Leu Arg Ala Gly Gln Arg Val Ile Ser Met Tyr Ala Glu Thr		
1795	1800	1805
Ala Ile Ala Leu Leu Leu Pro Gln Leu Glu Gln Gly Leu Phe Asp Asp		
1810	1815	1820
Leu Trp Arg Ile Arg Phe Ser Ser Val Gln Leu Leu Gly Asp Leu Leu		

1825 1830 1835 1840
 Phe His Ile Ser Gly Val Thr Gly Lys Met Thr Thr Glu Thr Ala Ser
 1845 1850 1855
 Glu Asp Asp Asn Phe Gly Thr Ala Gln Ser Asn Lys Ala Ile Ile Thr
 1860 1865 1870
 Ala Leu Gly Val Glu Arg Arg Asn Arg Val Leu Ala Gly Leu Tyr Met
 1875 1880 1885
 Gly Arg Ser Asp Thr Gln Leu Val Val Arg Gln Ala Ser Leu His Val
 1890 1895 1900
 Trp Lys Ile Val Val Ser Asn Thr Pro Arg Thr Leu Arg Glu Ile Leu
 1905 1910 1915 1920
 Pro Thr Leu Phe Gly Leu Leu Leu Gly Phe Leu Ala Ser Thr Cys Ala
 1925 1930 1935
 Asp Lys Arg Thr Ile Ala Ala Arg Thr Leu Gly Asp Leu Val Arg Lys
 1940 1945 1950
 Leu Gly Glu Lys Ile Leu Pro Glu Ile Ile Pro Ile Leu Glu Glu Gly
 1955 1960 1965
 Leu Arg Ser Gln Lys Ser Asp Glu Arg Gln Gly Val Cys Ile Gly Leu
 1970 1975 1980
 Ser Glu Ile Met Lys Ser Thr Ser Arg Asp Ala Val Leu Tyr Phe Ser
 1985 1990 1995 2000
 Glu Ser Leu Val Pro Thr Ala Arg Lys Ala Leu Cys Asp Pro Leu Glu
 2005 2010 2015
 Glu Val Arg Glu Ala Ala Ala Lys Thr Phe Glu Gln Leu His Ser Thr
 2020 2025 2030
 Ile Gly His Gln Ala Leu Glu Asp Ile Leu Pro Phe Leu Leu Lys Gln
 2035 2040 2045
 Leu Asp Asp Glu Glu Val Ser Glu Phe Ala Leu Asp Gly Leu Lys Gln
 2050 2055 2060
 Val Met Ala Ile Lys Ser Arg Val Val Leu Pro Tyr Leu Val Pro Lys
 2065 2070 2075 2080
 Leu Thr Thr Pro Pro Val Asn Thr Arg Val Leu Ala Phe Leu Ser Ser
 2085 2090 2095
 Val Ala Gly Asp Ala Leu Thr Arg His Leu Gly Val Ile Leu Pro Ala
 2100 2105 2110
 Val Met Leu Ala Leu Lys Glu Lys Leu Gly Thr Pro Asp Glu Gln Leu
 2115 2120 2125
 Glu Met Ala Asn Cys Gln Ala Val Ile Leu Ser Val Glu Asp Asp Thr
 2130 2135 2140
 Gly His Arg Ile Ile Ile Glu Asp Leu Leu Glu Ala Thr Arg Ser Pro
 2145 2150 2155 2160
 Glu Val Gly Met Arg Gln Ala Ala Ala Ile Ile Leu Asn Ile Tyr Cys
 2165 2170 2175
 Ser Arg Ser Lys Ala Asp Tyr Thr Ser His Leu Arg Ser Leu Val Ser
 2180 2185 2190
 Gly Leu Ile Arg Leu Phe Asn Asp Ser Ser Pro Val Val Leu Glu Glu
 2195 2200 2205
 Ser Trp Asp Ala Leu Asn Ala Ile Thr Lys Lys Leu Asp Ala Gly Asn
 2210 2215 2220
 Gln Leu Ala Leu Ile Glu Glu Leu His Lys Glu Ile Arg Leu Ile Gly
 2225 2230 2235 2240
 Asn Glu Ser Lys Gly Glu His Val Pro Gly Phe Cys Leu Pro Lys Lys
 2245 2250 2255
 Gly Val Thr Ser Ile Leu Pro Val Leu Arg Glu Gly Val Leu Thr Gly
 2260 2265 2270
 Ser Pro Glu Gln Lys Glu Glu Ala Lys Ala Leu Gly Leu Val Ile
 2275 2280 2285
 Arg Leu Thr Ser Ala Asp Ala Leu Arg Pro Ser Val Val Ser Ile Thr
 2290 2295 2300
 Gly Pro Leu Ile Arg Ile Leu Gly Asp Arg Phe Ser Trp Asn Val Lys
 2305 2310 2315 2320
 Ala Ala Leu Leu Glu Thr Leu Ser Leu Leu Ala Lys Val Gly Ile
 2325 2330 2335
 Ala Leu Lys Pro Phe Leu Pro Gln Leu Gln Thr Thr Phe Thr Lys Ala

2340 2345 2350
 Leu Gln Asp Ser Asn Arg Gly Val Arg Leu Lys Ala Ala Asp Ala Leu
 2355 2360 2365
 Gly Lys Leu Ile Ser Ile His Ile Lys Val Asp Pro Leu Phe Thr Glu
 2370 2375 2380
 Leu Leu Asn Gly Ile Arg Ala Met Glu Asp Pro Gly Val Arg Asp Thr
 2385 2390 2395 2400
 Met Leu Gln Ala Leu Arg Phe Val Ile Gln Gly Ala Gly Ala Lys Val
 2405 2410 2415
 Asp Ala Val Ile Arg Lys Asn Ile Val Ser Leu Leu Leu Ser Met Leu
 2420 2425 2430
 Gly His Asp Glu Asp Asn Thr Arg Ile Ser Ser Ala Gly Cys Leu Gly
 2435 2440 2445
 Glu Leu Cys Ala Phe Leu Thr Glu Glu Glu Leu Ser Ala Val Leu Gln
 2450 2455 2460
 Gln Cys Leu Leu Ala Asp Val Ser Gly Ile Asp Trp Met Val Arg His
 2465 2470 2475 2480
 Gly Arg Ser Leu Ala Leu Ser Val Ala Val Asn Val Ala Pro Gly Arg
 2485 2490 2495
 Leu Cys Ala Gly Arg Tyr Ser Ser Asp Val Gln Glu Met Ile Leu Ser
 2500 2505 2510
 Ser Ala Thr Ala Asp Arg Ile Pro Ile Ala Val Ser Gly Val Arg Gly
 2515 2520 2525
 Met Gly Phe Leu Met Arg His His Ile Glu Thr Gly Gly Gly Gln Leu
 2530 2535 2540
 Pro Ala Lys Leu Ser Ser Leu Phe Val Lys Cys Leu Gln Asn Pro Ser
 2545 2550 2555 2560
 Ser Asp Ile Arg Leu Val Ala Glu Lys Met Ile Trp Trp Ala Asn Lys
 2565 2570 2575
 Asp Pro Leu Pro Pro Leu Asp Pro Gln Ala Ile Lys Pro Ile Leu Lys
 2580 2585 2590
 Ala Leu Leu Asp Asn Thr Lys Asp Lys Asn Thr Val Val Arg Ala Tyr
 2595 2600 2605
 Ser Asp Gln Ala Ile Val Asn Leu Leu Lys Met Arg Gln Gly Glu Glu
 2610 2615 2620
 Val Phe Gln Ser Leu Ser Lys Ile Leu Asp Val Ala Ser Leu Glu Val
 2625 2630 2635 2640
 Leu Asn Glu Val Asn Arg Arg Ser Leu Lys Lys Leu Ala Ser Gln Ala
 2645 2650 2655
 Asp Ser Thr Glu Gln Val Asp Asp Thr Ile Leu Thr
 2660 2665 2668

<210> 3542

<211> 358

<212> PRT

<213> Homo sapiens

<400> 3542

Pro Trp Asn Pro Gln Asp Phe Pro Gly Asn Arg Gly Leu Met Gly Gln
 1 5 10 15
 Lys Gly Glu Ile Gly Pro Pro Gly Gln Gly Lys Lys Gly Ala Pro
 20 25 30
 Gly Met Pro Gly Leu Met Gly Ser Asn Gly Ser Pro Gly Gln Pro Gly
 35 40 45
 Thr Pro Gly Ser Lys Gly Ser Lys Gly Glu Pro Gly Ile Gln Gly Met
 50 55 60
 Pro Gly Ala Ser Gly Leu Lys Gly Glu Pro Gly Ala Thr Gly Ser Pro
 65 70 75 80
 Gly Glu Pro Gly Tyr Met Gly Leu Pro Gly Ile Gln Gly Lys Lys Gly
 85 90 95
 Asp Lys Gly Asn Gln Gly Glu Lys Gly Ile Gln Gly Gln Lys Gly Glu

100	105	110
Asn Gly Arg Gln Gly Ile Pro Gly Gln Gln Gly Ile Gln Gly His His		
115	120	125
Gly Ala Lys Gly Glu Arg Gly Glu Lys Gly Glu Pro Gly Val Arg Gly		
130	135	140
Ala Ile Gly Ser Lys Gly Glu Ser Gly Val Asp Gly Leu Met Gly Pro		
145	150	155
Ala Gly Pro Lys Gly Gln Pro Gly Asp Pro Gly Pro Gln Gly Pro Pro		
165	170	175
Gly Leu Asp Gly Lys Pro Gly Arg Glu Phe Ser Glu Gln Phe Ile Arg		
180	185	190
Gln Val Cys Thr Asp Val Ile Arg Ala Gln Leu Pro Val Leu Leu Gln		
195	200	205
Ser Gly Arg Ile Arg Asn Cys Asp His Cys Leu Ser Gln His Gly Ser		
210	215	220
Pro Gly Ile Pro Gly Pro Pro Gly Pro Ile Gly Pro Glu Gly Pro Arg		
225	230	235
Gly Leu Pro Gly Leu Pro Gly Arg Asp Gly Val Pro Gly Leu Val Gly		
245	250	255
Val Pro Gly Arg Pro Gly Val Arg Gly Leu Lys Gly Leu Pro Gly Arg		
260	265	270
Asn Gly Glu Lys Gly Ser Gln Gly Phe Gly Tyr Pro Gly Glu Gln Gly		
275	280	285
Pro Pro Gly Pro Pro Gly Pro Glu Gly Pro Pro Gly Ile Ser Lys Glu		
290	295	300
Gly Pro Pro Gly Asp Pro Gly Leu Pro Gly Lys Asp Gly Asp His Gly		
305	310	315
Lys Pro Gly Ile Gln Gly Gln Pro Gly Pro Gly Ile Cys Asp Pro		
325	330	335
Ser Leu Cys Phe Ser Val Ile Ala Arg Arg Asp Pro Phe Arg Lys Gly		
340	345	350
Pro Asn Tyr		
355		

<210> 3543
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 3543
Pro Ala Arg Ser Leu Glu Lys Met Lys Ala Ser Val Val Leu Ser Leu
1 5 10 15
Leu Gly Tyr Leu Val Val Pro Ser Gly Ala Tyr Ile Leu Gly Arg Cys
20 25 30
Thr Val Ala Lys Lys Leu His Asp Gly Gly Leu Asp Tyr Phe Glu Arg
35 40 45
Tyr Ser Leu Glu Asn Trp Val Cys Leu Ala Tyr Phe Glu Ser Lys Phe
50 55 60
Asn Pro Ser Ala Ile Tyr Glu Asn Thr Arg Glu Gly Tyr Thr Gly Phe
65 70 75 80
Gly Leu Phe Gln Met Arg Gly Ser Asp Trp Cys Gly Asp His Gly Arg
85 90 95
Asn Arg Cys His Met Ser Cys Ser Ala Leu Leu Asn Pro Asn Leu Glu
100 105 110
Lys Thr Ile Lys Cys Ala Lys Thr Ile Val Lys Gly Lys Glu Gly Met
115 120 125
Gly Ala Trp Pro Thr Trp Ser Arg Tyr Cys Gln Tyr Ser Asp Thr Leu
130 135 140
Ala Arg Trp Leu Asp Gly Cys Lys Leu
145 150 153

<210> 3544
 <211> 361
 <212> PRT
 <213> Homo sapiens

<400> 3544
 Ser Cys Arg Leu Ala Ala Gly Arg Leu Ala Gln Trp Leu Leu Arg Ala
 1 5 10 15
 Ser Arg Ser Gly Met Leu Arg Ala Gly Trp Leu Arg Gly Ala Ala Ala
 20 25 30
 Leu Ala Leu Leu Leu Ala Ala Arg Val Val Ala Ala Phe Glu Pro Ile
 35 40 45
 Thr Val Gly Leu Ala Ile Gly Ala Ala Ser Ala Ile Thr Gly Tyr Leu
 50 55 60
 Ser Tyr Asn Asp Ile Tyr Cys Arg Phe Ala Glu Cys Cys Arg Glu Glu
 65 70 75 80
 Arg Pro Leu Asn Ala Ser Ala Leu Lys Leu Asp Leu Glu Glu Lys Leu
 85 90 95
 Phe Gly Gln His Leu Ala Thr Glu Val Ile Phe Lys Ala Leu Thr Gly
 100 105 110
 Phe Arg Asn Asn Lys Asn Pro Lys Lys Pro Leu Thr Leu Ser Leu His
 115 120 125
 Gly Trp Ala Gly Thr Gly Lys Asn Phe Val Ser Gln Met Gly Ala Glu
 130 135 140
 Asn Leu His Pro Lys Gly Leu Lys Ser Asn Phe Val His Leu Phe Val
 145 150 155 160
 Ser Thr Leu His Phe Pro His Glu Gln Lys Ile Lys Leu Tyr Gln Asp
 165 170 175
 Gln Leu Gln Lys Trp Ile Arg Gly Asn Val Ser Ala Cys Ala Asn Ser
 180 185 190
 Val Phe Ile Phe Asp Glu Met Asp Lys Leu His Pro Gly Ile Ile Glu
 195 200 205
 Ala Ile Lys Pro Phe Leu Asp Tyr Tyr Glu His Val Glu Arg Val Ser
 210 215 220
 Tyr Arg Lys Ala Ile Phe Ile Phe Leu Ser Asn Ala Gly Gly Asp Leu
 225 230 235 240
 Ile Thr Lys Thr Ala Leu Asp Phe Trp Arg Ala Gly Arg Lys Arg Glu
 245 250 255
 Asp Ile Gln Leu Lys Asp Leu Glu Pro Val Leu Ser Val Gly Val Phe
 260 265 270
 Asn Asn Lys His Ser Gly Leu Trp His Ser Gly Leu Ile Asp Lys Asn
 275 280 285
 Leu Ile Asp Tyr Phe Ile Pro Phe Leu Pro Leu Glu Tyr Arg His Val
 290 295 300
 Lys Met Cys Val Arg Ala Glu Met Arg Ala Arg Gly Ser Ala Ile Asp
 305 310 315 320
 Glu Asp Ile Val Thr Arg Val Ala Glu Glu Met Thr Phe Phe Pro Arg
 325 330 335
 Asp Glu Lys Ile Tyr Ser Asp Lys Gly Cys Lys Thr Val Gln Ser Arg
 340 345 350
 Leu Asp Phe His
 355 356

<210> 3545
 <211> 89
 <212> PRT
 <213> Homo sapiens

<221> misc_feature

<222> (1)...(89)

<223> Xaa = any amino acid or nothing

<400> 3545

```

Ser Ala Gln Gly Arg Ser Trp Gly Arg Phe Tyr Arg Gln Ile Lys Arg
 1           5           10           15
His Pro Gly Ile Ile Pro Met Ile Gly Leu Ile Cys Leu Gly Met Gly
           20           25           30
Ser Ala Ala Leu Tyr Leu Leu Arg Leu Ala Leu Arg Ser Pro Asp Val
           35           40           45
Trp Xaa Ser Trp Asp Arg Lys Asn Asn Pro Glu Pro Trp Asn Arg Leu
           50           55           60
Ser Pro Asn Asp Gln Tyr Lys Phe Leu Ala Val Ser Thr Asp Tyr Lys
           65           70           75           80
Lys Leu Lys Lys Asp Arg Pro Asp Phe
           85           89

```

<210> 3546

<211> 189

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(189)

<223> Xaa = any amino acid or nothing

<400> 3546

```

Ala Leu Ser Thr Glu Thr Arg Thr Pro Asp Met Arg Arg Leu Leu Leu
 1           5           10           15
Val Thr Ser Leu Val Val Val Leu Leu Trp Glu Ala Gly Ala Val Pro
           20           25           30
Ala Pro Lys Val Pro Ile Lys Met Gln Val Lys His Trp Pro Ser Glu
           35           40           45
Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg Val Val Glu Pro Pro Glu
           50           55           60
Lys Asp Asp Gln Leu Val Val Leu Phe Pro Val Gln Lys Pro Lys Leu
           65           70           75           80
Leu Thr Thr Glu Glu Lys Pro Arg Gly Gln Gly Arg Gly Pro Ile Leu
           85           90           95
Pro Gly Thr Lys Ala Trp Met Glu Thr Glu Asp Thr Leu Gly Arg Val
           100          105          110
Leu Ser Pro Glu Pro Asp His Asp Ser Leu Tyr His Pro Pro Pro Glu
           115          120          125
Glu Asp Gln Gly Glu Glu Arg Pro Arg Leu Trp Val Met Pro Asn His
           130          135          140
Gln Val Leu Leu Gly Pro Glu Glu Asp Gln Asp His Ile Tyr His Pro
           145          150          155          160
Gln Xaa Gly Ser Arg Gly His His Cys Pro Arg Pro Val Pro Arg Pro
           165          170          175
Arg Leu Leu Gly Leu Gly Pro Ser Leu Pro Cys Pro Ser
           180          185          189

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<210> 3547

<211> 189

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1) ... (189)

<223> Xaa = any amino acid or nothing

<400> 3547

```

Ala Leu Ser Thr Glu Thr Arg Thr Pro Asp Met Arg Arg Leu Leu Leu
 1           5           10           15
Val Thr Ser Leu Val Val Val Leu Leu Trp Glu Ala Gly Ala Val Pro
           20           25           30
Ala Pro Lys Val Pro Ile Lys Met Gln Val Lys His Trp Pro Ser Glu
           35           40           45
Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg Val Val Glu Pro Pro Glu
           50           55           60
Lys Asp Asp Gln Leu Val Val Leu Phe Pro Val Gln Lys Pro Lys Leu
           65           70           75           80
Leu Thr Thr Glu Glu Lys Pro Arg Gly Gln Gly Arg Gly Pro Ile Leu
           85           90           95
Pro Gly Thr Lys Ala Trp Met Glu Thr Glu Asp Thr Leu Gly Arg Val
           100          105          110
Leu Ser Pro Glu Pro Asp His Asp Ser Leu Tyr His Pro Pro Pro Glu
           115          120          125
Glu Asp Gln Gly Glu Glu Arg Pro Arg Leu Trp Val Met Pro Asn His
           130          135          140
Gln Val Leu Leu Gly Pro Glu Glu Asp Gln Asp His Ile Tyr His Pro
           145          150          155          160
Gln Xaa Gly Ser Arg Gly His His Cys Pro Arg Pro Val Pro Arg Pro
           165          170          175
Arg Leu Leu Gly Leu Gly Pro Ser Leu Pro Cys Pro Ser
           180          185          189

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<210> 3548

<211> 545

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1) ... (545)

<223> Xaa = any amino acid or nothing

<400> 3548

```

Thr Trp Leu Pro Ser Val Pro Ala Glu Glu Val Gln Gln Pro Glu Met
 1           5           10           15
Ala Ala Val Leu Asn Ala Glu Arg Leu Glu Val Ser Val Asp Gly Leu
           20           25           30
Thr Leu Ser Pro Asp Pro Glu Glu Arg Pro Gly Ala Glu Gly Ala Pro
           35           40           45
Leu Ala Ala Ala Thr Ala Ala Thr Ala Leu Ala Thr Trp Ile Arg Ser
           50           55           60
Arg Pro Gly Arg Leu Arg Gly Thr Ala Arg Ser Pro Gly Arg Arg Ala
           65           70           75           80
Ala Gly Gly Ala Ala Glu Glu Ala Arg Arg Leu Glu Gln Arg Trp Gly
           85           90           95
Phe Gly Leu Glu Glu Leu Tyr Gly Leu Ala Leu Arg Phe Phe Lys Glu
           100          105          110
Lys Asp Gly Lys Ala Phe His Pro Thr Tyr Glu Glu Lys Leu Lys Leu
           115          120          125
Val Ala Leu His Lys Gln Val Leu Met Gly Pro Tyr Asn Pro Asp Thr
           130          135          140
Cys Pro Glu Val Gly Phe Phe Asp Val Leu Gly Asn Asp Arg Arg Arg
           145          150          155          160
Glu Trp Ala Ala Leu Gly Asn Met Ser Lys Glu Asp Ala Met Val Glu

```

165 170 175
 Phe Val Lys Leu Leu Asn Arg Cys Cys His Leu Phe Ser Thr Tyr Val
 180 185 190
 Ala Ser His Lys Ile Glu Lys Glu Glu Gln Glu Lys Lys Arg Lys Glu
 195 200 205
 Glu Glu Glu Arg Arg Arg Arg Glu Glu Glu Glu Arg Glu Arg Leu Gln
 210 215 220
 Lys Glu Glu Glu Lys Arg Arg Arg Glu Glu Glu Glu Arg Leu Arg Arg
 225 230 235 240
 Glu Glu Glu Glu Arg Arg Arg Ile Glu Glu Glu Arg Leu Arg Leu Glu
 245 250 255
 Gln Gln Lys Gln Gln Ile Met Ala Ala Leu Asn Ser Gln Thr Ala Val
 260 265 270
 Gln Phe Gln Gln Tyr Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln
 275 280 285
 Gln Gln Ile Leu Ile Arg Gln Leu Gln Glu Gln His Tyr Gln Gln Tyr
 290 295 300
 Met Gln Gln Leu Tyr Gln Val Gln Leu Ala Gln Gln Ala Ala Leu
 305 310 315 320
 Gln Lys Gln Gln Glu Val Val Val Ala Gly Ser Ser Leu Pro Thr Ser
 325 330 335
 Ser Lys Val Glu Cys Asn Cys Thr Gln Val Ile Xaa Cys Gln Phe Asn
 340 345 350
 Arg Gln Ala Lys Thr His Thr Asp Ser Ser Glu Lys Glu Leu Glu Pro
 355 360 365
 Glu Ala Ala Glu Glu Ala Leu Glu Asn Gly Pro Lys Glu Ser Leu Pro
 370 375 380
 Val Ile Ala Ala Pro Ser Met Trp Thr Arg Pro Gln Ile Lys Asp Phe
 385 390 395 400
 Lys Glu Lys Ile Gln Gln Asp Ala Asp Ser Val Ile Thr Val Gly Arg
 405 410 415
 Gly Glu Val Val Thr Val Arg Val Pro Thr His Glu Glu Gly Ser Tyr
 420 425 430
 Leu Phe Trp Glu Phe Ala Thr Asp Asn Tyr Asp Ile Gly Phe Gly Val
 435 440 445
 Tyr Phe Glu Trp Thr Asp Ser Pro Asn Thr Ala Val Ser Val His Val
 450 455 460
 Ser Glu Ser Ser Asp Asp Asp Glu Glu Glu Glu Glu Asn Ile Gly Cys
 465 470 475 480
 Glu Glu Lys Ala Lys Lys Asn Ala Asn Lys Pro Leu Leu Asp Glu Ile
 485 490 495
 Val Pro Val Tyr Arg Arg Asp Cys His Glu Glu Val Tyr Ala Gly Ser
 500 505 510
 His Gln Tyr Pro Gly Arg Gly Val Tyr Leu Leu Lys Phe Asp Asn Ser
 515 520 525
 Tyr Ser Leu Trp Arg Ser Lys Ser Val Tyr Tyr Arg Val Tyr Tyr Thr
 530 535 540
 Arg
 545

<210> 3549
 <211> 585
 <212> PRT
 <213> Homo sapiens

<400> 3549
 Pro Ala Val Leu Val Leu Glu Pro Ala Ser Gln Ser Arg Lys Gln Gln
 1 5 10 15
 Asn Thr Ala Ser Ala Thr Ala Gln His Trp Ser Ala Gln Ile His Lys
 20 25 30
 Glu Ser Phe Leu Ala Pro Val Phe Thr Lys Asp Glu Gln Lys His Arg

5310

545 550 555 560
 Pro Leu Pro Ala Glu Arg Glu His Gly Ala Gln Ala Gly Glu Gly Ala
 565 570 575
 Leu Lys Asp Ser Asn Asn Asp Thr Asn
 580 585

<210> 3550

<211> 82

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(82)

<223> Xaa = any amino acid or nothing

<400> 3550

Gln Leu Asn Leu Asn Lys Ile Ala Thr Ser Gln Lys His Arg Asp Phe
 1 5 10 15
 Val Ala Glu Ser Val Gly Glu Lys Pro Val Gly Ser Leu Ala Gly Ile
 20 25 30
 Gly Glu Val Met Asp Lys Lys Leu Glu Glu Gly Cys Phe Asp Lys Ala
 35 40 45
 Tyr Val Val Leu Gly Gln Phe Leu Val Leu Lys Lys Asp Glu Asp Leu
 50 55 60
 Phe Xaa Glu Trp Leu Arg Asp Thr Gly Gly Ala Arg Thr Arg Gly Ser
 65 70 75 80
 Arg Glu
 82

<210> 3551

<211> 1301

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(1301)

<223> Xaa = any amino acid or nothing

<400> 3551

Gly Asp Leu Leu Glu Val Gly Leu Pro Pro Gly Leu Glu Phe Pro Arg
 1 5 10 15
 Gly Ile Cys Leu Arg Gly Leu Arg Arg Thr Met Ser Leu Asp Phe Gly
 20 25 30
 Ser Val Ala Leu Pro Val Gln Asn Glu Asp Glu Glu Tyr Asp Glu Glu
 35 40 45
 Asp Tyr Glu Arg Glu Lys Glu Leu Gln Gln Leu Leu Thr Asp Leu Pro
 50 55 60
 His Asp Met Leu Asp Asp Asp Leu Ser Ser Pro Glu Leu Gln Tyr Ser
 65 70 75 80
 Asp Cys Ser Glu Asp Gly Thr Asp Gly Gln Pro His His Pro Glu Gln
 85 90 95
 Leu Glu Met Ser Trp Asn Glu Gln Met Leu Pro Lys Ser Gln Ser Val
 100 105 110
 Asn Gly Pro Ser Cys Gln Gly Leu Glu Pro Tyr Asn Lys Val Thr Tyr
 115 120 125
 Lys Pro Tyr Gln Ser Ser Ala Gln Asn Asn Gly Ser Pro Ala Gln Glu
 130 135 140
 Ile Thr Gly Ser Asp Thr Phe Glu Gly Leu Gln Gln Phe Leu Gly

145					150					155			160
Ala	Asn	Glu	Asn	Ser	Ala	Glu	Asn	Met	Gln	Ile	Ile	Gln	Leu
					165				170				175
Leu	Asn	Lys	Ala	Lys	Glu	Arg	Gln	Leu	Glu	Asn	Leu	Ile	Glu
			180					185					190
Asn	Glu	Ser	Glu	Arg	Gln	Ile	Arg	Tyr	Leu	Asn	His	Gln	Leu
		195					200					205	Ile
Ile	Lys	Asp	Glu	Lys	Asp	Gly	Leu	Thr	Leu	Ser	Leu	Arg	Glu
		210				215					220		Ser
Lys	Leu	Phe	Gln	Asn	Gly	Lys	Glu	Arg	Glu	Ile	Gln	Leu	Glu
225					230					235			240
Ile	Lys	Ala	Leu	Glu	Thr	Gln	Ile	Gln	Ala	Leu	Lys	Val	Asn
			245						250				255
Gln	Met	Ile	Lys	Lys	Ser	Arg	Thr	Thr	Glu	Met	Ala	Leu	Glu
		260						265					270
Lys	Gln	Gln	Leu	Val	Asp	Leu	His	His	Ser	Glu	Ser	Leu	Gln
		275					280					285	Arg
Arg	Glu	Gln	His	Glu	Ser	Ile	Val	Met	Gly	Leu	Thr	Lys	Lys
		290				295					300		Tyr
Glu	Gln	Val	Leu	Ser	Leu	Gln	Lys	Asn	Leu	Asp	Ala	Thr	Val
305					310					315			320
Leu	Lys	Glu	Gln	Glu	Asp	Ile	Cys	Ser	Arg	Leu	Lys	Asp	His
			325						330				335
Gln	Leu	Glu	Arg	Asn	Gln	Glu	Ala	Ile	Lys	Leu	Glu	Lys	Thr
			340					345					350
Ile	Asn	Lys	Leu	Thr	Arg	Ser	Leu	Glu	Glu	Ser	Gln	Lys	Gln
		355					360					365	Cys
His	Leu	Leu	Gln	Ser	Gly	Ser	Val	Gln	Glu	Val	Ala	Gln	Leu
		370				375						380	Phe
Gln	Leu	Gln	Gln	Ala	Gln	Lys	Ala	His	Ala	Met	Ser	Ala	Asn
385					390					395			400
Lys	Ala	Leu	Gln	Glu	Glu	Leu	Thr	Glu	Leu	Lys	Asp	Glu	Ile
			405						410				415
Tyr	Glu	Ser	Ala	Ala	Lys	Leu	Gly	Ile	His	Pro	Ser	Asp	Ser
		420						425					430
Glu	Leu	Asn	Ile	Glu	Leu	Thr	Glu	Ser	Tyr	Val	Asp	Leu	Gly
		435				440						445	Ile
Lys	Val	Asn	Trp	Lys	Lys	Ser	Lys	Val	Thr	Ser	Ile	Val	Gln
		450				455					460		Glu
Asp	Pro	Asn	Glu	Glu	Leu	Ser	Lys	Asp	Glu	Phe	Ile	Leu	Lys
465					470					475			480
Ala	Glu	Val	Gln	Arg	Leu	Leu	Gly	Ser	Asn	Ser	Met	Lys	Arg
			485						490				495
Val	Ser	Gln	Leu	Gln	Asn	Asp	Leu	Lys	Asp	Cys	His	Lys	Lys
		500						505					510
Asp	Leu	His	Gln	Val	Lys	Lys	Asp	Glu	Lys	Ser	Ile	Glu	Val
		515					520					525	Glu
Lys	Thr	Asp	Thr	Ser	Glu	Lys	Pro	Lys	Asn	Gln	Leu	Trp	Pro
		530					535					540	Glu
Ser	Thr	Ser	Asp	Val	Val	Arg	Asp	Asp	Ile	Leu	Leu	Lys	Asn
545					550					555			560
Ile	Gln	Val	Leu	Gln	Gln	Gln	Asn	Gln	Glu	Leu	Lys	Glu	Thr
			565						570				575
Lys	Leu	Arg	Asn	Thr	Asn	Gln	Asp	Leu	Cys	Asn	Gln	Met	Arg
			580					585					590
Val	Gln	Asp	Phe	Asp	His	Asp	Lys	Gln	Glu	Ala	Val	Asp	Arg
		595					600					605	Cys
Arg	Thr	Tyr	Gln	Gln	His	His	Glu	Ala	Met	Lys	Thr	Gln	Ile
		610				615						620	Arg
Ser	Leu	Leu	Ala	Lys	His	Ala	Leu	Glu	Lys	Gln	Gln	Leu	Phe
625					630					635			640
Tyr	Glu	Arg	Thr	His	Leu	Gln	Leu	Arg	Ser	Glu	Leu	Asp	Lys
			645						650				655
Lys	Glu	Val	Thr	Ala	Val	Gln	Glu	Cys	Tyr	Leu	Glu	Val	Cys
													Arg

660										665					670							
Lys	Asp	Asn	Leu	Glu	Leu	Thr	Leu	Arg	Lys	Thr	Thr	Glu	Lys	Glu	Gln							
675										680					685							
Gln	Thr	Gln	Glu	Lys	Ile	Lys	Glu	Lys	Leu	Ile	Gln	Gln	Leu	Glu	Lys							
690										695					700							
Glu	Trp	Gln	Ser	Lys	Leu	Asp	Gln	Thr	Ile	Lys	Ala	Met	Lys	Lys	Lys							
705					710					715					720							
Thr	Leu	Asp	Cys	Gly	Ser	Gln	Thr	Asp	Gln	Val	Thr	Thr	Ser	Asp	Val							
725										730					735							
Ile	Ser	Lys	Lys	Glu	Met	Ala	Ile	Met	Ile	Glu	Glu	Gln	Lys	Cys	Thr							
740										745					750							
Ile	Gln	Gln	Asn	Leu	Glu	Gln	Glu	Lys	Asp	Ile	Ala	Ile	Lys	Gly	Ala							
755										760					765							
Met	Lys	Lys	Leu	Glu	Ile	Glu	Leu	Glu	Leu	Lys	His	Cys	Glu	Asn	Ile							
770					775					780												
Thr	Lys	Gln	Val	Glu	Ile	Ala	Val	Gln	Asn	Ala	His	Gln	Arg	Trp	Leu							
785					790					795					800							
Gly	Glu	Leu	Pro	Glu	Leu	Ala	Glu	Tyr	Gln	Ala	Leu	Val	Lys	Ala	Glu							
805										810					815							
Gln	Lys	Lys	Trp	Glu	Glu	Gln	His	Glu	Val	Ser	Val	Asn	Lys	Arg	Ile							
820										825					830							
Ser	Phe	Ala	Val	Ser	Glu	Ala	Lys	Glu	Lys	Trp	Lys	Ser	Glu	Leu	Glu							
835										840					845							
Asn	Met	Arg	Lys	Asn	Ile	Leu	Pro	Gly	Lys	Glu	Leu	Glu	Glu	Lys	Ile							
850					855					860												
His	Ser	Leu	Gln	Lys	Glu	Leu	Glu	Leu	Lys	Asn	Glu	Glu	Val	Pro	Val							
865					870					875					880							
Val	Ile	Arg	Ala	Glu	Leu	Ala	Lys	Ala	Arg	Ser	Glu	Trp	Asn	Lys	Glu							
885										890					895							
Lys	Gln	Glu	Glu	Ile	His	Arg	Ile	Gln	Glu	Gln	Asn	Glu	Gln	Asp	Tyr							
900										905					910							
Arg	Gln	Phe	Leu	Asp	Asp	His	Arg	Asn	Lys	Ile	Asn	Glu	Val	Leu	Ala							
915										920					925							
Ala	Ala	Lys	Glu	Asp	Phe	Met	Lys	Gln	Lys	Thr	Glu	Leu	Leu	Leu	Gln							
930					935					940												
Lys	Glu	Thr	Glu	Leu	Gln	Thr	Cys	Leu	Asp	Gln	Ser	Arg	Arg	Glu	Trp							
945					950					955					960							
Thr	Met	Gln	Glu	Ala	Lys	Arg	Ile	Gln	Leu	Glu	Ile	Tyr	Gln	Tyr	Glu							
965										970					975							
Glu	Asp	Ile	Leu	Thr	Val	Leu	Gly	Val	Leu	Leu	Ser	Asp	Thr	Gln	Lys							
980										985					990							
Glu	His	Ile	Ser	Asp	Ser	Glu	Asp	Lys	Gln	Leu	Leu	Glu	Ile	Met	Ser							
995										1000					1005							
Thr	Cys	Ser	Ser	Lys	Trp	Met	Ser	Val	Gln	Tyr	Phe	Glu	Lys	Leu	Lys							
1010					1015					1020												
Gly	Cys	Ile	Gln	Lys	Ala	Phe	Gln	Asp	Thr	Leu	Pro	Leu	Leu	Val	Glu							
1025					1030					1035					1040							
Asn	Ala	Asp	Pro	Glu	Trp	Lys	Lys	Arg	Asn	Met	Ala	Glu	Leu	Ser	Lys							
1045										1050					1055							
Asp	Ser	Ala	Ser	Gln	Gly	Thr	Gly	Gln	Gly	Asp	Pro	Gly	Pro	Ala	Ala							
1060										1065					1070							
Gly	His	His	Ala	Gln	Pro	Leu	Ala	Leu	Gln	Ala	Thr	Glu	Ala	Glu	Ala							
1075										1080					1085							
Asp	Lys	Lys	Lys	Val	Leu	Glu	Ile	Lys	Asp	Leu	Cys	Cys	Gly	His	Cys							
1090					1095					1100												
Phe	Gln	Glu	Leu	Glu	Lys	Ala	Lys	Gln	Glu	Cys	Gln	Asp	Leu	Lys	Gly							
1105					1110					1115					1120							
Lys	Leu	Glu	Lys	Cys	Cys	Arg	His	Leu	Gln	His	Leu	Glu	Arg	Lys	His							
1125										1130					1135							
Lys	Ala	Val	Val	Glu	Lys	Ile	Gly	Glu	Glu	Asn	Asn	Lys	Val	Val	Glu							
1140										1145					1150							
Glu	Leu	Ile	Glu	Glu	Asn	Asn	Asp	Met	Lys	Asn	Lys	Leu	Glu	Glu	Leu							
1155										1160					1165							
Gln	Thr	Leu	Cys	Lys	Thr	Pro	Pro	Arg	Ser	Leu	Ser	Ala	Gly	Ala	Ile							

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      1170              1175              1180
Glu Asn Ala Cys Leu Pro Cys Ser Gly Gly Ala Leu Glu Glu Leu Arg
1185              1190              1195              1200
Gly Gln Tyr Ile Lys Ala Val Lys Lys Ile Lys Cys Asp Met Leu Arg
      1205              1210              1215
Tyr Ile Gln Glu Ser Lys Glu Arg Ala Ala Glu Met Val Lys Ala Glu
      1220              1225              1230
Val Leu Xaa Glu Arg Gln Glu Thr Ala Arg Lys Met Arg Lys Tyr Tyr
      1235              1240              1245
Leu Ile Cys Leu Gln Gln Ile Leu Gln Asp Asp Gly Lys Glu Gly Ala
      1250              1255              1260
Glu Lys Lys Ile Met Asn Ala Ala Ser Lys Leu Ala Thr Met Ala Lys
1265              1270              1275              1280
Leu Leu Glu Thr Pro Ile Ser Ser Lys Ser Gln Ser Lys Thr Thr Gln
      1285              1290              1295
Ser Gly Met Ser Lys
      1300 1301

```

```

<210> 3552
<211> 131
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(131)
<223> Xaa = any amino acid or nothing

```

```

      <400> 3552
Ala Arg Thr Arg Gln Thr Ser Gly Gln Ala Arg Glu Pro Glu Lys Glu
  1              5              10              15
Ser Pro Ala Pro Gly Gly Gly Gly Leu Ala Glu Ile Arg Ser Arg Gln
      20              25              30
Gln Leu Ser Gln Thr Ser Arg Ile Pro Pro Leu Ala Lys Asp Gln Ala
      35              40              45
Val Glu Ala Met Phe Pro Pro Ala Arg Gly Lys Glu Leu Leu Ser Phe
      50              55              60
Glu Asp Val Ala Met Tyr Phe Thr Arg Glu Glu Trp Gly His Leu Asn
      65              70              75              80
Trp Gly Gln Lys Asp Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Arg
      85              90              95
Asn Met Val Leu Leu Val Tyr Phe Gln Phe Asp Ala Ala Ile Pro Leu
      100              105              110
Cys Xaa Thr Ser Leu Ala His Ser Ser Trp Leu Gln Leu Tyr Phe Arg
      115              120              125
Leu Tyr Phe
      130 131

```

```

<210> 3553
<211> 529
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(529)
<223> Xaa = any amino acid or nothing

```

```

      <400> 3553
Pro Gly Val Arg Gly Val Glu Ala Pro Gly Gly Val Ala Pro Gly Arg

```


1	5	10	15
Asn Ala Met Arg	Arg Gly Glu Arg Arg Asp	Ala Gly Gly Pro Arg Pro	
	20	25	30
Glu Ser Pro Val	Pro Ala Gly Arg Ala Ser	Leu Glu Glu Pro Pro Asp	
	35	40	45
Gly Pro Ser Ala	Gly Gln Ala Thr Gly Pro	Gly Glu Gly Arg Arg Ser	
	50	55	60
Thr Glu Ser Glu	Val Tyr Asp Asp Gly Thr	Asn Thr Phe Phe Trp Arg	
	65	70	75
Ala His Thr Leu	Thr Val Leu Phe Ile Leu	Thr Cys Thr Leu Gly Tyr	
	85	90	95
Val Thr Leu Leu	Glu Glu Thr Pro Gln Asp	Thr Ala Tyr Asn Thr Lys	
	100	105	110
Arg Gly Ile Val	Ala Ser Ile Leu Val Phe	Leu Cys Phe Gly Val Thr	
	115	120	125
Gln Ala Lys Asp	Gly Pro Phe Ser Arg Pro	His Pro Ala Tyr Trp Arg	
	130	135	140
Phe Trp Leu Cys	Val Ser Val Val Tyr Glu	Leu Phe Leu Ile Phe Ile	
	145	150	155
Leu Phe Gln Thr	Val Gln Asp Gly Arg Gln	Phe Leu Lys Tyr Val Asp	
	165	170	175
Pro Lys Leu Gly	Val Pro Leu Pro Glu Arg	Asp Tyr Gly Gly Asn Cys	
	180	185	190
Leu Ile Tyr Asp	Pro Asp Asn Glu Thr Asp	Pro Phe His Asn Ile Trp	
	195	200	205
Asp Lys Leu Asp	Gly Phe Val Pro Ala His	Phe Leu Gly Trp Tyr Leu	
	210	215	220
Lys Thr Leu Met	Ile Arg Asp Trp Trp Met	Cys Met Ile Ile Ser Val	
	225	230	235
Met Phe Glu Phe	Leu Glu Tyr Ser Leu Glu	His Gln Leu Pro Asn Phe	
	245	250	255
Ser Glu Cys Trp	Trp Asp His Trp Ile Met	Asp Val Leu Val Cys Asn	
	260	265	270
Gly Leu Gly Ile	Tyr Cys Gly Met Lys Thr	Leu Glu Trp Leu Ser Leu	
	275	280	285
Lys Thr Tyr Lys	Trp Gln Gly Leu Trp Asn	Ile Pro Thr Tyr Lys Gly	
	290	295	300
Lys Met Lys Arg	Ile Ala Phe Gln Phe Thr	Pro Tyr Ser Trp Val Arg	
	305	310	315
Phe Glu Trp Lys	Pro Ala Ser Ser Leu Arg	Arg Trp Leu Ala Val Cys	
	325	330	335
Gly Ile Ile Leu	Val Phe Leu Leu Ala Glu	Leu Asn Thr Phe Tyr Leu	
	340	345	350
Lys Phe Val Leu	Trp Met Pro Pro Glu His	Tyr Leu Val Leu Leu Arg	
	355	360	365
Leu Val Phe Phe	Val Asn Val Gly Gly Val	Ala Met Arg Glu Ile Tyr	
	370	375	380
Asp Phe Met Asp	Asp Pro Lys Pro His Lys	Lys Leu Gly Pro Gln Ala	
	385	390	395
Trp Leu Val Ala	Ala Ile Thr Ala Thr Glu	Leu Leu Ile Val Val Lys	
	405	410	415
Tyr Asp Pro His	Thr Leu Thr Leu Ser Leu	Pro Phe Tyr Ile Ser Gln	
	420	425	430
Cys Trp Thr Leu	Gly Ser Val Leu Ala Leu	Thr Trp Thr Val Trp Arg	
	435	440	445
Phe Phe Leu Arg	Asp Ile Thr Leu Arg Tyr	Lys Glu Thr Arg Trp Gln	
	450	455	460
Lys Trp Gln Asn	Lys Asp Asp Gln Gly Ser	Thr Val Gly Asn Gly Asp	
	465	470	475
Gln His Pro Leu	Gly Leu Asp Glu Asp Leu	Leu Gly Pro Gly Val Ala	
	485	490	495
Glu Gly Glu Gly	Ala Pro Thr Pro Asn Xaa	Pro Arg Gly Pro Ala Pro	
	500	505	510
Arg Pro Leu Pro	Ser Ala Pro Arg Ala Val	Cys Gly Ala Ser Ser Arg	

515

520

525

Arg
529

<210> 3554

<211> 701

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(701)

<223> Xaa = any amino acid or nothing

<400> 3554

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Phe Asp Glu Phe Ser Ala Leu Pro Ser Pro Ser Leu Gln Thr Ser Trp
 1          5          10          15
Ser Phe Gly Pro Met Ser Arg Arg Ala Leu Arg Arg Leu Arg Gly Glu
          20          25          30
Gln Arg Gly Gln Glu Pro Leu Gly Pro Gly Ala Leu His Phe Asp Leu
          35          40          45
Arg Asp Asp Asp Asp Ala Glu Glu Glu Gly Pro Lys Arg Glu Leu Gly
          50          55          60
Val Arg Arg Pro Gly Gly Ala Gly Lys Glu Gly Val Arg Val Asn Asn
          65          70          75          80
Arg Phe Glu Leu Ile Asn Ile Asp Asp Leu Glu Asp Asp Pro Val Val
          85          90          95
Asn Gly Glu Arg Ser Gly Cys Ala Leu Thr Asp Ala Val Ala Pro Gly
          100          105          110
Asn Lys Gly Arg Gly Gln Arg Gly Asn Thr Glu Ser Lys Thr Asp Gly
          115          120          125
Asp Asp Thr Glu Thr Val Pro Ser Glu Gln Ser His Ala Ser Gly Lys
          130          135          140
Leu Arg Lys Lys Lys Lys Lys Gln Lys Asn Lys Lys Ser Ser Thr Gly
          145          150          155          160
Glu Ala Ser Glu Asn Gly Leu Glu Asp Ile Asp Arg Ile Leu Glu Arg
          165          170          175
Ile Glu Asp Ser Thr Gly Leu Asn Arg Pro Gly Pro Ala Pro Leu Ser
          180          185          190
Ser Arg Lys His Val Leu Tyr Val Glu His Arg His Leu Asn Pro Asp
          195          200          205
Thr Glu Leu Lys Arg Tyr Phe Gly Ala Arg Ala Ile Leu Gly Glu Gln
          210          215          220
Arg Pro Arg Gln Arg Gln Arg Val Tyr Pro Lys Cys Thr Trp Leu Thr
          225          230          235          240
Thr Pro Lys Ser Thr Trp Pro Arg Tyr Ser Lys Pro Gly Leu Ser Met
          245          250          255
Arg Leu Leu Glu Ser Lys Lys Gly Leu Ser Phe Phe Ala Phe Glu His
          260          265          270
Ser Glu Glu Tyr Gln Gln Ala Gln His Lys Phe Leu Val Ala Val Glu
          275          280          285
Ser Met Glu Pro Asn Asn Ile Val Val Leu Leu Gln Thr Ser Pro Tyr
          290          295          300
His Val Asp Ser Leu Leu Gln Leu Ser Asp Ala Cys Arg Phe Gln Glu
          305          310          315          320
Asp Gln Glu Met Ala Arg Asp Leu Val Glu Arg Ala Leu Tyr Ser Met
          325          330          335
Glu Cys Ala Phe His Pro Leu Phe Ser Leu Thr Ser Gly Ala Cys Arg
          340          345          350
Leu Asp Tyr Arg Arg Pro Glu Asn Arg Ser Phe Tyr Leu Ala Leu Tyr
          355          360          365
Lys Gln Met Ser Phe Leu Glu Lys Arg Gly Cys Pro Arg Thr Ala Leu

```

```

      370              375              380
Glu Tyr Cys Lys Leu Ile Leu Ser Leu Glu Pro Asp Glu Asp Pro Leu
385              390              395              400
Cys Met Leu Leu Leu Ile Asp His Leu Ala Leu Arg Ala Arg Asn Tyr
      405              410              415
Glu Tyr Leu Ile Arg Leu Phe Gln Glu Trp Glu Val Gly Ala Ser Leu
      420              425              430
Ala His Arg Asn Leu Ser Gln Leu Pro Asn Phe Ala Phe Ser Val Pro
      435              440              445
Leu Ala Tyr Phe Leu Leu Ser Gln Gln Thr Asp Leu Pro Glu Cys Glu
      450              455              460
Gln Ser Ser Ala Arg Gln Lys Ala Ser Leu Leu Ile Gln Gln Ala Leu
465              470              475              480
Thr Met Phe Pro Gly Val Leu Leu Pro Leu Leu Glu Ser Cys Ser Val
      485              490              495
Arg Pro Asp Ala Ser Val Ser Ser His Arg Phe Phe Gly Pro Asn Ala
      500              505              510
Glu Ile Ser Gln Pro Pro Ala Leu Ser Gln Leu Val Asn Leu Tyr Leu
      515              520              525
Gly Arg Ser His Phe Leu Trp Lys Glu Pro Ala Thr Met Ser Trp Leu
      530              535              540
Glu Glu Asn Val His Glu Val Leu Gln Ala Val Asp Ala Gly Asp Pro
545              550              555              560
Ala Val Glu Ala Cys Glu Asn Arg Arg Lys Val Leu Tyr Gln Arg Ala
      565              570              575
Pro Arg Asn Ile His Arg His Val Ile Leu Ser Glu Ile Lys Glu Ala
      580              585              590
Val Ala Ala Leu Pro Pro Asp Val Thr Thr Gln Ser Val Met Gly Phe
      595              600              605
Asp Pro Leu Pro Pro Ser Asp Thr Ile Tyr Ser Tyr Val Arg Pro Glu
      610              615              620
Arg Leu Ser Pro Ile Ser His Gly Asn Thr Ile Ala Leu Phe Phe Arg
625              630              635              640
Ser Leu Leu Pro Asn Tyr Thr Met Glu Gly Glu Arg Pro Glu Glu Gly
      645              650              655
Val Ala Gly Gly Leu Asn Arg Asn Gln Gly Leu Asn Arg Leu Met Leu
      660              665              670
Ala Val Arg Asp Met Met Ala Asn Phe His Leu Asn Asp Leu Glu Ala
      675              680              685
Pro His Glu Asp Asp Ala Xaa Gly Glu Gly Glu Trp Asp
      690              695              700 701

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<210> 3555

<211> 701

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(701)

<223> Xaa = any amino acid or nothing

<400> 3555

```

Phe Asp Glu Phe Ser Ala Leu Pro Ser Pro Ser Leu Gln Thr Ser Trp
 1              5              10              15
Ser Phe Gly Pro Met Ser Arg Arg Ala Leu Arg Arg Leu Arg Gly Glu
      20              25              30
Gln Arg Gly Gln Glu Pro Leu Gly Pro Gly Ala Leu His Phe Asp Leu
      35              40              45
Arg Asp Asp Asp Ala Glu Glu Gly Pro Lys Arg Glu Leu Gly
      50              55              60
Val Arg Arg Pro Gly Gly Ala Gly Lys Glu Gly Val Arg Val Asn Asn

```

65					70					75				80
Arg	Phe	Glu	Leu	Ile	Asn	Ile	Asp	Asp	Leu	Glu	Asp	Asp	Pro	Val
				85					90					95
Asn	Gly	Glu	Arg	Ser	Gly	Cys	Ala	Leu	Thr	Asp	Ala	Val	Ala	Pro
			100					105					110	Gly
Asn	Lys	Gly	Arg	Gly	Gln	Arg	Gly	Asn	Thr	Glu	Ser	Lys	Thr	Asp
		115					120					125		Gly
Asp	Asp	Thr	Glu	Thr	Val	Pro	Ser	Glu	Gln	Ser	His	Ala	Ser	Gly
		130				135					140			Lys
Leu	Arg	Lys	Lys	Lys	Lys	Lys	Gln	Lys	Asn	Lys	Lys	Ser	Ser	Thr
				150					155					Gly
145														160
Glu	Ala	Ser	Glu	Asn	Gly	Leu	Glu	Asp	Ile	Asp	Arg	Ile	Leu	Glu
				165					170					Arg
Ile	Glu	Asp	Ser	Thr	Gly	Leu	Asn	Arg	Pro	Gly	Pro	Ala	Pro	Leu
			180					185					190	Ser
Ser	Arg	Lys	His	Val	Leu	Tyr	Val	Glu	His	Arg	His	Leu	Asn	Pro
		195					200					205		Asp
Thr	Glu	Leu	Lys	Arg	Tyr	Phe	Gly	Ala	Arg	Ala	Ile	Leu	Gly	Glu
		210					215					220		Gln
Arg	Pro	Arg	Gln	Arg	Gln	Arg	Val	Tyr	Pro	Lys	Cys	Thr	Trp	Leu
				230						235				Thr
225														240
Thr	Pro	Lys	Ser	Thr	Trp	Pro	Arg	Tyr	Ser	Lys	Pro	Gly	Leu	Ser
				245					250					Met
Arg	Leu	Leu	Glu	Ser	Lys	Lys	Gly	Leu	Ser	Phe	Phe	Ala	Phe	Glu
			260					265					270	His
Ser	Glu	Glu	Tyr	Gln	Gln	Ala	Gln	His	Lys	Phe	Leu	Val	Ala	Val
		275					280					285		Glu
Ser	Met	Glu	Pro	Asn	Asn	Ile	Val	Val	Leu	Leu	Gln	Thr	Ser	Pro
		290			295						300			Tyr
His	Val	Asp	Ser	Leu	Leu	Gln	Leu	Ser	Asp	Ala	Cys	Arg	Phe	Gln
				310						315				Glu
305														320
Asp	Gln	Glu	Met	Ala	Arg	Asp	Leu	Val	Glu	Arg	Ala	Leu	Tyr	Ser
				325					330					Met
Glu	Cys	Ala	Phe	His	Pro	Leu	Phe	Ser	Leu	Thr	Ser	Gly	Ala	Cys
			340					345					350	Arg
Leu	Asp	Tyr	Arg	Arg	Pro	Glu	Asn	Arg	Ser	Phe	Tyr	Leu	Ala	Leu
		355					360					365		Tyr
Lys	Gln	Met	Ser	Phe	Leu	Glu	Lys	Arg	Gly	Cys	Pro	Arg	Thr	Ala
		370				375					380			Leu
Glu	Tyr	Cys	Lys	Leu	Ile	Leu	Ser	Leu	Glu	Pro	Asp	Glu	Asp	Pro
				390						395				Leu
385														400
Cys	Met	Leu	Leu	Leu	Ile	Asp	His	Leu	Ala	Leu	Arg	Ala	Arg	Asn
				405					410					Tyr
Glu	Tyr	Leu	Ile	Arg	Leu	Phe	Gln	Glu	Trp	Glu	Val	Gly	Ala	Ser
			420					425					430	Leu
Ala	His	Arg	Asn	Leu	Ser	Gln	Leu	Pro	Asn	Phe	Ala	Phe	Ser	Val
			435				440					445		Pro
Leu	Ala	Tyr	Phe	Leu	Leu	Ser	Gln	Gln	Thr	Asp	Leu	Pro	Glu	Cys
					455					460				Glu
Gln	Ser	Ser	Ala	Arg	Gln	Lys	Ala	Ser	Leu	Leu	Ile	Gln	Gln	Ala
				470					475					Leu
465														480
Thr	Met	Phe	Pro	Gly	Val	Leu	Leu	Pro	Leu	Leu	Glu	Ser	Cys	Ser
				485					490					Val
Arg	Pro	Asp	Ala	Ser	Val	Ser	Ser	His	Arg	Phe	Phe	Gly	Pro	Asn
			500					505					510	Ala
Glu	Ile	Ser	Gln	Pro	Pro	Ala	Leu	Ser	Gln	Leu	Val	Asn	Leu	Tyr
			515				520					525		Leu
Gly	Arg	Ser	His	Phe	Leu	Trp	Lys	Glu	Pro	Ala	Thr	Met	Ser	Trp
					535						540			Leu
530														
Glu	Glu	Asn	Val	His	Glu	Val	Leu	Gln	Ala	Val	Asp	Ala	Gly	Asp
				550						555				Pro
545														560
Ala	Val	Glu	Ala	Cys	Glu	Asn	Arg	Arg	Lys	Val	Leu	Tyr	Gln	Arg
				565					570					Ala
Pro	Arg	Asn	Ile	His	Arg	His	Val	Ile	Leu	Ser	Glu	Ile	Lys	Glu
														Ala

580	585	590
Val Ala Ala Leu Pro Pro Asp	Val Thr Thr Gln Ser Val Met Gly Phe	
595	600	605
Asp Pro Leu Pro Pro Ser Asp	Thr Ile Tyr Ser Tyr Val Arg Pro Glu	
610	615	620
Arg Leu Ser Pro Ile Ser His	Gly Asn Thr Ile Ala Leu Phe Phe Arg	
625	630	635
Ser Leu Leu Pro Asn Tyr Thr Met	Glu Gly Glu Arg Pro Glu Glu Gly	
645	650	655
Val Ala Gly Gly Leu Asn Arg Asn	Gln Gly Leu Asn Arg Leu Met Leu	
660	665	670
Ala Val Arg Asp Met Met Ala Asn	Phe His Leu Asn Asp Leu Glu Ala	
675	680	685
Pro His Glu Asp Asp Ala Xaa	Gly Glu Gly Glu Trp Asp	
690	695	700 701

<210> 3556

<211> 579

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(579)

<223> Xaa = any amino acid or nothing

<400> 3556

Lys Thr Arg Gly Thr Met Phe Tyr Tyr Pro Asn Val Leu Gln Arg His	
1 5 10 15	
Thr Gly Cys Phe Ala Thr Ile Trp Leu Ala Ala Thr Arg Gly Ser Arg	
20 25 30	
Leu Val Lys Arg Glu Tyr Leu Arg Val Asn Val Val Lys Thr Cys Glu	
35 40 45	
Glu Ile Leu Asn Tyr Val Leu Val Arg Val Gln Pro Pro Gln Pro Gly	
50 55 60	
Leu Pro Arg Pro Arg Phe Ser Leu Tyr Leu Ser Ala Gln Leu Gln Ile	
65 70 75 80	
Gly Val Ile Arg Val Tyr Ser Gln Gln Cys Gln Tyr Leu Val Glu Asp	
85 90 95	
Ile Gln His Ile Leu Glu Arg Leu His Arg Ala Gln Leu Gln Ile Arg	
100 105 110	
Ile Asp Met Glu Thr Glu Leu Pro Ser Leu Leu Leu Pro Asn His Leu	
115 120 125	
Ala Met Met Glu Thr Leu Glu Asp Ala Pro Asp Pro Phe Phe Gly Met	
130 135 140	
Met Ser Val Asp Pro Arg Leu Pro Ser Pro Phe Asp Ile Pro Gln Ile	
145 150 155 160	
Arg His Leu Leu Glu Ala Ala Ile Pro Glu Arg Val Glu Glu Ile Pro	
165 170 175	
Pro Glu Val Pro Thr Glu Pro Arg Glu Pro Glu Arg Ile Pro Val Thr	
180 185 190	
Val Leu Pro Pro Glu Ala Ile Thr Ile Leu Glu Ala Glu Pro Ile Arg	
195 200 205	
Met Leu Glu Ile Glu Gly Glu Arg Glu Leu Pro Glu Val Ser Arg Arg	
210 215 220	
Glu Leu Asp Leu Leu Ile Ala Glu Glu Glu Ala Ile Leu Leu Glu	
225 230 235 240	
Ile Pro Arg Leu Pro Pro Ala Pro Ala Glu Xaa Gly Gln Glu Leu	
245 250 255	
Leu Asp Gln Val Gly Cys Gln Cys Trp Glu Gly Ser Pro His Phe Ser	
260 265 270	
Cys Pro Phe Pro Leu Arg Val Glu Gly Met Gly Glu Ala Leu Gly Pro	

```

      275      280      285
Glu Glu Leu Arg Leu Thr Gly Trp Glu Pro Gly Ala Leu Leu Met Glu
 290      295      300
Val Thr Pro Pro Glu Glu Leu Arg Leu Pro Ala Pro Pro Ser Pro Glu
 305      310      315      320
Arg Arg Pro Pro Val Pro Pro Pro Arg Arg Arg Arg Arg Arg Arg
      325      330      335
Leu Leu Phe Trp Asp Lys Glu Thr Gln Ile Ser Pro Glu Lys Phe Gln
      340      345      350
Glu Gln Leu Gln Thr Arg Ala His Cys Trp Glu Cys Pro Met Val Gln
      355      360      365
Pro Pro Glu Arg Thr Ile Arg Gly Pro Ala Glu Leu Phe Arg Thr Pro
      370      375      380
Thr Leu Ser Gly Trp Leu Pro Pro Glu Leu Leu Gly Leu Trp Thr His
 385      390      395      400
Cys Ala Gln Pro Pro Pro Lys Ala Leu Arg Arg Glu Leu Pro Glu Glu
      405      410      415
Ala Ala Ala Glu Glu Arg Arg Lys Ile Glu Val Pro Ser Glu Ile
      420      425      430
Glu Val Pro Arg Glu Ala Leu Glu Pro Ser Val Pro Leu Met Val Ser
      435      440      445
Leu Glu Ile Ser Leu Glu Ala Ala Glu Glu Glu Lys Ser Arg Ile Ser
 450      455      460
Leu Ile Pro Pro Glu Glu Arg Trp Ala Trp Pro Glu Val Glu Ala Pro
 465      470      475      480
Glu Ala Pro Ala Leu Pro Val Val Pro Glu Leu Pro Glu Val Pro Met
      485      490      495
Glu Met Pro Leu Val Leu Pro Pro Glu Leu Glu Leu Leu Ser Leu Glu
      500      505      510
Ala Val His Arg Ala Val Ala Leu Glu Leu Gln Ala Asn Arg Glu Pro
      515      520      525
Asp Phe Ser Ser Leu Val Ser Pro Leu Ser Pro Arg Arg Met Ala Ala
 530      535      540
Arg Val Phe Tyr Leu Leu Leu Val Leu Ser Ala Gln Gln Ile Leu His
 545      550      555      560
Val Lys Gln Glu Lys Pro Tyr Gly Arg Leu Leu Ile Gln Pro Gly Pro
      565      570      575
Arg Phe His
      579

```

<210> 3557

<211> 579

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(579)

<223> Xaa = any amino acid or nothing

<400> 3557

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Lys Thr Arg Gly Thr Met Phe Tyr Tyr Pro Asn Val Leu Gln Arg His
 1      5      10      15
Thr Gly Cys Phe Ala Thr Ile Trp Leu Ala Ala Thr Arg Gly Ser Arg
      20      25      30
Leu Val Lys Arg Glu Tyr Leu Arg Val Asn Val Val Lys Thr Cys Glu
      35      40      45
Glu Ile Leu Asn Tyr Val Leu Val Arg Val Gln Pro Pro Gln Pro Gly
      50      55      60
Leu Pro Arg Pro Arg Phe Ser Leu Tyr Leu Ser Ala Gln Leu Gln Ile
      65      70      75      80
Gly Val Ile Arg Val Tyr Ser Gln Gln Cys Gln Tyr Leu Val Glu Asp

```

				85					90					95	
Ile	Gln	His	Ile	Leu	Glu	Arg	Leu	His	Arg	Ala	Gln	Leu	Gln	Ile	Arg
			100					105					110		
Ile	Asp	Met	Glu	Thr	Glu	Leu	Pro	Ser	Leu	Leu	Leu	Pro	Asn	His	Leu
		115					120					125			
Ala	Met	Met	Glu	Thr	Leu	Glu	Asp	Ala	Pro	Asp	Pro	Phe	Phe	Gly	Met
	130					135					140				
Met	Ser	Val	Asp	Pro	Arg	Leu	Pro	Ser	Pro	Phe	Asp	Ile	Pro	Gln	Ile
145					150					155				160	
Arg	His	Leu	Leu	Glu	Ala	Ala	Ile	Pro	Glu	Arg	Val	Glu	Glu	Ile	Pro
			165						170					175	
Pro	Glu	Val	Pro	Thr	Glu	Pro	Arg	Glu	Pro	Glu	Arg	Ile	Pro	Val	Thr
			180					185					190		
Val	Leu	Pro	Pro	Glu	Ala	Ile	Thr	Ile	Leu	Glu	Ala	Glu	Pro	Ile	Arg
		195					200					205			
Met	Leu	Glu	Ile	Glu	Gly	Glu	Arg	Glu	Leu	Pro	Glu	Val	Ser	Arg	Arg
210					215					220					
Glu	Leu	Asp	Leu	Leu	Ile	Ala	Glu	Glu	Glu	Glu	Ala	Ile	Leu	Leu	Glu
225					230					235				240	
Ile	Pro	Arg	Leu	Pro	Pro	Pro	Ala	Pro	Ala	Glu	Xaa	Gly	Gln	Glu	Leu
			245					250					255		
Leu	Asp	Gln	Val	Gly	Cys	Gln	Cys	Trp	Glu	Gly	Ser	Pro	His	Phe	Ser
		260						265					270		
Cys	Pro	Phe	Pro	Leu	Arg	Val	Glu	Gly	Met	Gly	Glu	Ala	Leu	Gly	Pro
	275						280					285			
Glu	Glu	Leu	Arg	Leu	Thr	Gly	Trp	Glu	Pro	Gly	Ala	Leu	Leu	Met	Glu
290					295						300				
Val	Thr	Pro	Pro	Glu	Glu	Leu	Arg	Leu	Pro	Ala	Pro	Pro	Ser	Pro	Glu
305					310					315				320	
Arg	Arg	Pro	Pro	Val	Pro	Pro	Pro	Pro	Arg	Arg	Arg	Arg	Arg	Arg	Arg
			325						330					335	
Leu	Leu	Phe	Trp	Asp	Lys	Glu	Thr	Gln	Ile	Ser	Pro	Glu	Lys	Phe	Gln
		340						345					350		
Glu	Gln	Leu	Gln	Thr	Arg	Ala	His	Cys	Trp	Glu	Cys	Pro	Met	Val	Gln
		355					360					365			
Pro	Pro	Glu	Arg	Thr	Ile	Arg	Gly	Pro	Ala	Glu	Leu	Phe	Arg	Thr	Pro
	370					375					380				
Thr	Leu	Ser	Gly	Trp	Leu	Pro	Pro	Glu	Leu	Leu	Gly	Leu	Trp	Thr	His
385					390					395				400	
Cys	Ala	Gln	Pro	Pro	Lys	Ala	Leu	Arg	Arg	Glu	Leu	Pro	Glu	Glu	
			405					410					415		
Ala	Ala	Ala	Glu	Glu	Glu	Arg	Arg	Lys	Ile	Glu	Val	Pro	Ser	Glu	Ile
			420					425					430		
Glu	Val	Pro	Arg	Glu	Ala	Leu	Glu	Pro	Ser	Val	Pro	Leu	Met	Val	Ser
	435					440					445				
Leu	Glu	Ile	Ser	Leu	Glu	Ala	Ala	Glu	Glu	Glu	Lys	Ser	Arg	Ile	Ser
450					455						460				
Leu	Ile	Pro	Pro	Glu	Glu	Arg	Trp	Ala	Trp	Pro	Glu	Val	Glu	Ala	Pro
465					470					475				480	
Glu	Ala	Pro	Ala	Leu	Pro	Val	Val	Pro	Glu	Leu	Pro	Glu	Val	Pro	Met
			485					490					495		
Glu	Met	Pro	Leu	Val	Leu	Pro	Pro	Glu	Leu	Glu	Leu	Leu	Ser	Leu	Glu
			500					505					510		
Ala	Val	His	Arg	Ala	Val	Ala	Leu	Glu	Leu	Gln	Ala	Asn	Arg	Glu	Pro
		515					520					525			
Asp	Phe	Ser	Ser	Leu	Val	Ser	Pro	Leu	Ser	Pro	Arg	Arg	Met	Ala	Ala
	530					535					540				
Arg	Val	Phe	Tyr	Leu	Leu	Leu	Val	Leu	Ser	Ala	Gln	Gln	Ile	Leu	His
545					550					555				560	
Val	Lys	Gln	Glu	Lys	Pro	Tyr	Gly	Arg	Leu	Leu	Ile	Gln	Pro	Gly	Pro
			565					570					575		
Arg	Phe	His													
		579													

<210> 3558
 <211> 623
 <212> PRT
 <213> Homo sapiens

<221> misc_feature
 <222> (1)...(623)
 <223> Xaa = any amino acid or nothing

<400> 3558
 Ile Arg Pro Arg Pro Arg Gly Arg Arg Arg Ala Leu Asp Ser Pro Asn
 1 5 10 15
 Ala Ala Ala Pro Pro Val Tyr Val Cys Arg Ser Pro Gly Glu Pro Thr
 20 25 30
 Ser Leu Val Asn Met Ala Ser Glu Asp Ile Ala Lys Leu Ala Glu Thr
 35 40 45
 Leu Ala Lys Thr Gln Val Ala Gly Gly Gln Leu Ser Phe Lys Gly Lys
 50 55 60
 Ser Leu Lys Leu Asn Thr Ala Glu Asp Ala Lys Asp Val Ile Lys Glu
 65 70 75 80
 Ile Glu Asp Phe Asp Ser Leu Glu Ala Leu Arg Leu Glu Gly Asn Thr
 85 90 95
 Val Gly Val Glu Ala Ala Arg Val Ile Ala Lys Ala Leu Xaa Lys Lys
 100 105 110
 Ser Glu Leu Lys Arg Cys His Trp Ser Asp Met Phe Thr Gly Arg Leu
 115 120 125
 Arg Thr Glu Ile Pro Pro Ala Leu Ile Ser Leu Gly Glu Gly Leu Ile
 130 135 140
 Thr Ala Gly Ala Gln Leu Val Glu Leu Asp Leu Ser Asp Asn Ala Phe
 145 150 155 160
 Gly Pro Asp Gly Val Gln Gly Phe Glu Ala Leu Leu Lys Ser Ser Ala
 165 170 175
 Cys Phe Thr Leu Gln Glu Leu Lys Leu Asn Asn Cys Gly Met Gly Ile
 180 185 190
 Gly Gly Gly Lys Ile Leu Ala Ala Ala Leu Thr Glu Cys His Arg Lys
 195 200 205
 Ser Ser Ala Gln Gly Lys Pro Leu Ala Leu Lys Val Phe Val Ala Gly
 210 215 220
 Arg Asn Arg Leu Glu Asn Asp Gly Ala Thr Ala Leu Ala Glu Ala Phe
 225 230 235 240
 Arg Val Ile Gly Thr Leu Glu Glu Val His Met Pro Gln Asn Gly Ile
 245 250 255
 Asn His Pro Gly Ile Thr Ala Leu Ala Gln Ala Phe Ala Val Asn Pro
 260 265 270
 Leu Leu Arg Val Ile Asn Leu Asn Asp Asn Thr Phe Thr Glu Lys Gly
 275 280 285
 Ala Val Ala Met Ala Glu Thr Leu Lys Thr Leu Arg Gln Val Glu Val
 290 295 300
 Ile Asn Phe Gly Asp Cys Leu Val Arg Ser Lys Gly Ala Val Ala Ile
 305 310 315 320
 Ala Asp Ala Ile Arg Gly Gly Leu Pro Lys Leu Lys Glu Leu Asn Leu
 325 330 335
 Ser Phe Cys Glu Ile Lys Arg Asp Ala Ala Leu Ala Val Ala Glu Ala
 340 345 350
 Met Ala Asp Lys Ala Glu Leu Glu Lys Leu Asp Leu Asn Gly Asn Thr
 355 360 365
 Leu Gly Glu Glu Gly Cys Glu Gln Leu Gln Glu Val Leu Glu Gly Phe
 370 375 380
 Asn Met Ala Lys Val Leu Ala Ser Leu Ser Asp Glu Asp Glu Glu
 385 390 395 400
 Glu Glu Glu Glu Gly Glu Glu Glu Glu Ala Glu Glu Glu Glu


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      405      410      415
Glu Glu Asp Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu
      420      425      430
Glu Pro Gln Gln Arg Gly Gln Gly Glu Lys Ser Ala Thr Pro Ser Arg
      435      440      445
Lys Ile Leu Asp Pro Asn Thr Gly Glu Pro Ala Pro Val Leu Ser Ser
      450      455      460
Pro Pro Pro Ala Asp Val Ser Thr Phe Leu Ala Phe Pro Ser Pro Glu
      465      470      475      480
Lys Leu Leu Arg Leu Gly Pro Lys Ser Ser Val Leu Ile Ala Gln Gln
      485      490      495
Thr Asp Thr Ser Asp Pro Glu Lys Val Val Ser Ala Phe Leu Lys Val
      500      505      510
Ser Ser Val Phe Lys Asp Glu Ala Thr Val Arg Met Ala Val Gln Asp
      515      520      525
Ala Val Asp Ala Leu Met Gln Lys Ala Phe Asn Ser Ser Ser Phe Asn
      530      535      540
Ser Asn Thr Phe Leu Thr Arg Leu Leu Val His Met Gly Leu Leu Lys
      545      550      555      560
Ser Glu Asp Lys Val Lys Ala Ile Ala Asn Leu Tyr Gly Pro Leu Met
      565      570      575
Ala Leu Asn His Met Val Gln Gln Asp Tyr Phe Pro Lys Ala Leu Ala
      580      585      590
Pro Leu Leu Leu Ala Phe Val Thr Lys Pro Asn Ser Ala Leu Glu Ser
      595      600      605
Cys Ser Phe Ala Arg His Ser Leu Leu Gln Thr Leu Tyr Lys Val
      610      615      620      623

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<210> 3559

<211> 623

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(623)

<223> Xaa = any amino acid or nothing

<400> 3559

```

Ile Arg Pro Arg Pro Arg Gly Arg Arg Arg Ala Leu Asp Ser Pro Asn
  1           5           10           15
Ala Ala Ala Pro Pro Val Tyr Val Cys Arg Ser Pro Gly Glu Pro Thr
      20           25           30
Ser Leu Val Asn Met Ala Ser Glu Asp Ile Ala Lys Leu Ala Glu Thr
      35           40           45
Leu Ala Lys Thr Gln Val Ala Gly Gly Gln Leu Ser Phe Lys Gly Lys
      50           55           60
Ser Leu Lys Leu Asn Thr Ala Glu Asp Ala Lys Asp Val Ile Lys Glu
      65           70           75           80
Ile Glu Asp Phe Asp Ser Leu Glu Ala Leu Arg Leu Glu Gly Asn Thr
      85           90           95
Val Gly Val Glu Ala Ala Arg Val Ile Ala Lys Ala Leu Xaa Lys Lys
      100          105          110
Ser Glu Leu Lys Arg Cys His Trp Ser Asp Met Phe Thr Gly Arg Leu
      115          120          125
Arg Thr Glu Ile Pro Pro Ala Leu Ile Ser Leu Gly Glu Gly Leu Ile
      130          135          140
Thr Ala Gly Ala Gln Leu Val Glu Leu Asp Leu Ser Asp Asn Ala Phe
      145          150          155          160
Gly Pro Asp Gly Val Gln Gly Phe Glu Ala Leu Leu Lys Ser Ser Ala
      165          170          175
Cys Phe Thr Leu Gln Glu Leu Lys Leu Asn Asn Cys Gly Met Gly Ile

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<210> 3560 . . .
<211> 398
<212> PRT
<213> Homo sapiens

<221> misc feature
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<222> (1)...(398)

<223> Xaa = any amino acid or nothing

<400> 3560

```

Phe Val Arg Glu Leu Pro Arg Pro Arg Pro Gly Ala Ala Thr Ala Ala
 1           5           10           15
Ile Met Val Ser Val Ile Asn Thr Val Asp Thr Ser His Glu Asp Met
           20           25           30
Ile His Asp Ala Gln Met Asp Tyr Tyr Gly Thr Arg Leu Ala Thr Cys
           35           40           45
Ser Ser Asp Arg Ser Val Lys Ile Phe Asp Val Arg Asn Gly Gly Gln
           50           55           60
Ile Leu Ile Ala Asp Leu Arg Gly His Glu Gly Pro Val Trp Gln Val
65           70           75           80
Ala Trp Ala His Pro Met Tyr Gly Asn Ile Leu Ala Ser Cys Ser Tyr
           85           90           95
Asp Arg Lys Val Ile Ile Trp Arg Glu Asn Gly Thr Trp Glu Lys
           100          105          110
Ser His Glu His Ala Gly His Asp Ser Ser Val Asn Ser Val Cys Trp
           115          120          125
Ala Pro His Asp Tyr Gly Leu Ile Leu Ala Cys Gly Ser Ser Asp Gly
           130          135          140
Ala Ile Ser Leu Leu Thr Tyr Thr Gly Glu Gly Gln Trp Glu Val Lys
145          150          155          160
Lys Ile Asn Asn Ala His Thr Ile Gly Cys Asn Ala Val Ser Trp Ala
           165          170          175
Pro Ala Val Val Pro Gly Ser Leu Ile Asp His Pro Ser Gly Gln Lys
           180          185          190
Pro Asn Tyr Ile Lys Arg Phe Ala Ser Gly Gly Cys Asp Asn Leu Ile
           195          200          205
Lys Leu Trp Lys Glu Glu Glu Asp Gly Gln Trp Lys Glu Glu Gln Lys
           210          215          220
Leu Glu Ala His Ser Asp Trp Val Arg Asp Val Ala Trp Ala Pro Ser
225          230          235          240
Ile Gly Leu Pro Thr Ser Thr Ile Ala Ser Cys Ser Gln Asp Gly Arg
           245          250          255
Val Phe Ile Trp Thr Cys Asp Asp Ala Ser Ser Asn Thr Trp Ser Pro
           260          265          270
Lys Leu Leu His Lys Phe Asn Asp Val Val Trp His Val Ser Trp Ser
           275          280          285
Ile Thr Ala Asn Ile Leu Ala Val Ser Gly Gly Asp Asn Lys Val Thr
           290          295          300
Leu Trp Lys Glu Ser Val Asp Gly Gln Trp Val Cys Ile Ser Asp Val
305          310          315          320
Asn Lys Gly Gln Gly Ser Val Ser Ala Ser Val Thr Glu Gly Gln Gln
           325          330          335
Asn Glu Gln Xaa Gln Asp Arg Trp Gly Leu Ala Pro His Pro Pro Ala
           340          345          350
Pro Gly Leu Pro Leu Pro Gly Pro Thr Asn Gln Thr Thr Gly Lys Ser
           355          360          365
Pro Gln Leu Gln Gln Asp Tyr Phe Pro Arg Arg Ser Tyr Arg Cys Ser
           370          375          380
His Arg Leu Ile Ile Cys Leu Asn Val Ile Gly Asp Ala Leu
385          390          395          398

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<210> 3561

<211> 151

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(151)

<223> Xaa = any amino acid or nothing

<400> 3561

Trp	Arg	Val	Lys	Glu	Met	Thr	Ser	Thr	Leu	Pro	Lys	Ala	Leu	Gly	Arg
1				5					10					15	
Lys	Thr	Ala	Ser	Arg	Ser	His	Thr	Thr	Leu	Gln	Gly	Gly	Ser	Cys	Cys
		20						25					30		
Pro	Val	Leu	Trp	Thr	Ala	Lys	Leu	Arg	Cys	Arg	Lys	Leu	Arg	Phe	Pro
		35					40					45			
Leu	Pro	Pro	Pro	Pro	Pro	Ser	Ser	Ser	Ala	Trp	Pro	Trp	Gln	Gly	Trp
	50					55					60				
Gly	Ile	Arg	Gly	Glu	Gln	Glu	Ala	Glu	Gly	Pro	Leu	Gly	Glu	Thr	Gly
65				70						75				80	
Pro	Pro	Val	Gly	Pro	Glu	Leu	Ser	Gly	Leu	Arg	Gln	Trp	Arg	Lys	Leu
				85					90					95	
Ile	Lys	Gly	Arg	Tyr	Gly	Glu	Trp	Arg	Gly	Ser	Gly	Gln	Lys	Thr	Gly
		100						105					110		
Gln	Pro	Ser	Xaa	Thr	Thr	Met	Gln	Gly	Gly	Glu	Thr	Glu	Glu	Asn	Arg
		115					120					125			
Thr	Glu	Thr	Thr	Thr	Gly	Asn	Lys	Gln	Arg	Glu	Ser	Glu	Ala	Pro	Trp
	130					135					140				
Val	Arg	His	Thr	Tyr	Ile	Thr									
145						150	151								

<210> 3562

<211> 559

<212> PRT

<213> Homo sapiens

<400> 3562

Pro	Met	Met	Ala	Met	Pro	Phe	Phe	Glu	Arg	Phe	Lys	Ser	Ser	Ile	Gln
1				5					10					15	
Arg	Pro	Ser	Pro	Val	Leu	Val	Leu	Ser	Gln	Asn	Thr	Lys	Arg	Glu	Ser
		20						25					30		
Gly	Arg	Lys	Val	Gln	Ser	Gly	Asn	Ile	Asn	Ala	Ala	Lys	Thr	Ile	Ala
		35					40					45			
Asp	Ile	Ile	Arg	Thr	Cys	Leu	Gly	Pro	Lys	Ser	Met	Met	Lys	Met	Leu
	50					55					60				
Leu	Asp	Pro	Met	Gly	Gly	Ile	Val	Met	Thr	Asn	Asp	Gly	Asn	Ala	Ile
65				70						75				80	
Leu	Arg	Glu	Ile	Gln	Val	Gln	His	Pro	Ala	Ala	Lys	Ser	Met	Ile	Glu
				85					90					95	
Ile	Ser	Arg	Thr	Gln	Asp	Glu	Glu	Val	Gly	Asp	Gly	Thr	Thr	Ser	Val
		100						105					110		
Ile	Ile	Leu	Ala	Gly	Glu	Met	Leu	Ser	Val	Ala	Glu	His	Phe	Leu	Glu
		115					120					125			
Gln	Gln	Met	His	Pro	Thr	Val	Val	Ile	Ser	Ala	Tyr	Arg	Lys	Ala	Leu
	130					135					140				
Asp	Asp	Met	Ile	Ser	Thr	Leu	Lys	Lys	Ile	Ser	Ile	Pro	Val	Asp	Ile
145						150				155				160	
Ser	Asp	Ser	Asp	Met	Met	Leu	Asn	Ile	Ile	Asn	Ser	Ser	Ile	Thr	Thr
				165					170					175	
Lys	Ala	Ile	Ser	Arg	Trp	Ser	Ser	Leu	Ala	Cys	Asn	Ile	Ala	Leu	Asp
			180					185					190		
Ala	Val	Lys	Met	Val	Gln	Phe	Glu	Glu	Asn	Gly	Arg	Lys	Glu	Ile	Asp
		195					200					205			
Ile	Lys	Lys	Tyr	Ala	Arg	Val	Glu	Lys	Ile	Pro	Gly	Gly	Ile	Ile	Glu
	210					215					220				
Asp	Ser	Cys	Val	Leu	Arg	Gly	Val	Met	Ile	Asn	Lys	Asp	Val	Thr	His

225		230		235		240
Pro Arg Met Arg	Arg Tyr Ile Lys Asn	Pro Arg Ile Val Leu Leu Asp				
	245	250	255			
Ser Ser Leu Glu Tyr Lys Lys Gly Glu	Ser Gln Thr Asp Ile Glu Ile					
	260	265	270			
Thr Arg Glu Glu Asp Phe Thr Arg Ile Leu Gln Met Glu Glu Tyr						
	275	280	285			
Ile Gln Gln Leu Cys Glu Asp Ile Ile Gln Leu Lys Pro Asp Val Val						
	290	295	300			
Ile Thr Glu Lys Gly Ile Ser Asp Leu Ala Gln His Tyr Leu Met Arg						
305	310	315	320			
Ala Asn Ile Thr Ala Ile Arg Arg Val Arg Lys Thr Asp Asn Asn Arg						
	325	330	335			
Ile Ala Arg Ala Cys Gly Ala Arg Ile Val Ser Arg Pro Glu Glu Leu						
	340	345	350			
Arg Glu Asp Asp Val Gly Thr Gly Ala Gly Leu Leu Glu Ile Lys Lys						
	355	360	365			
Ile Gly Asp Glu Tyr Phe Thr Phe Ile Thr Asp Cys Lys Asp Pro Lys						
370	375	380				
Ala Cys Thr Ile Leu Leu Arg Gly Ala Ser Lys Glu Ile Leu Ser Glu						
385	390	395	400			
Val Glu Arg Asn Phe Gln Asp Ala Met Gln Val Cys Arg Asn Val Leu						
	405	410	415			
Leu Asp Pro Gln Leu Val Pro Gly Gly Gly Ala Ser Glu Met Ala Val						
	420	425	430			
Ala His Ala Leu Thr Glu Lys Ser Lys Ala Met Thr Gly Val Glu Gln						
	435	440	445			
Trp Pro Tyr Arg Ala Val Ala Gln Ala Leu Glu Val Ile Pro Arg Thr						
450	455	460				
Leu Ile Gln Asn Cys Gly Ala Ser Thr Ile Arg Leu Leu Thr Ser Leu						
465	470	475	480			
Arg Ala Lys His Thr Gln Glu Asn Cys Glu Thr Trp Gly Val Asn Gly						
	485	490	495			
Glu Thr Gly Thr Leu Val Asp Met Lys Glu Leu Gly Ile Trp Glu Pro						
	500	505	510			
Leu Ala Val Lys Leu Gln Thr Tyr Lys Thr Ala Val Glu Thr Ala Val						
	515	520	525			
Leu Leu Leu Arg Ile Asp Asp Ile Val Ser Gly His Lys Lys Lys Gly						
530	535	540				
Asp Asp Gln Ser Arg Gln Gly Gly Ala Pro Asp Ala Gly Gln Glu						
545	550	555	559			

<210> 3563

<211> 337

<212> PRT

<213> Homo sapiens

<400> 3563

Gly Pro Ser Leu Leu Gly Thr Arg Gly Thr Pro Asn Pro Ala Arg Thr
1 5 10 15
Leu Gln Ile Phe Phe Leu Ile Ile Gly Arg Arg Leu Thr Gly Arg Met
20 25 30
Ala Ala Val Asp Asp Leu Gln Phe Glu Glu Phe Gly Asn Ala Ala Thr
35 40 45
Ser Leu Thr Ala Asn Pro Asp Ala Thr Thr Val Asn Ile Glu Asp Pro
50 55 60
Gly Glu Thr Pro Lys His Gln Pro Gly Ser Pro Arg Gly Ser Gly Arg
65 70 75 80
Glu Glu Asp Asp Glu Leu Leu Gly Asn Asp Ser Asp Lys Thr Glu
85 90 95
Leu Leu Ala Gly Gln Lys Lys Ser Ser Pro Phe Trp Thr Phe Glu Tyr

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<210> 3564
<211> 109
<212> PRT
<213> Homo sapiens
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```
<210> 3565
<211> 359
<212> PRT
<213> Homo sapiens
```

<400> 3565

```

Phe Val Thr Asp Phe Pro Ala Arg Ser Met Ala Ala Thr Ser Leu Met
 1          5          10          15
Ser Ala Leu Ala Ala Arg Leu Leu Gln Pro Ala His Ser Cys Ser Leu
          20          25          30
Arg Leu Arg Pro Phe His Leu Ala Ala Val Arg Asn Glu Ala Val Val
          35          40          45
Ile Ser Gly Arg Lys Leu Ala Gln Gln Ile Lys Gln Glu Val Arg Gln
          50          55          60
Glu Val Glu Glu Trp Val Ala Ser Gly Asn Lys Arg Pro His Leu Ser
          65          70          75          80
Val Ile Leu Val Gly Glu Asn Pro Ala Ser His Ser Tyr Val Leu Asn
          85          90          95
Lys Thr Arg Ala Ala Ala Val Val Gly Ile Asn Ser Glu Thr Ile Met
          100          105          110
Lys Pro Ala Ser Ile Ser Glu Glu Glu Leu Leu Asn Leu Ile Asn Lys
          115          120          125
Leu Asn Asn Asp Asp Asn Val Asp Gly Leu Leu Val Gln Leu Pro Leu
          130          135          140
Pro Glu His Ile Asp Glu Arg Arg Ile Cys Asn Ala Val Ser Pro Asp
          145          150          155          160
Lys Asp Val Asp Gly Phe His Val Ile Asn Val Gly Arg Met Cys Leu
          165          170          175
Asp Gln Tyr Ser Met Leu Pro Ala Thr Pro Trp Gly Val Trp Glu Ile
          180          185          190
Ile Lys Arg Thr Gly Ile Pro Thr Leu Gly Lys Asn Val Val Val Ala
          195          200          205
Gly Arg Ser Lys Asn Val Gly Met Pro Ile Ala Met Leu Leu His Thr
          210          215          220
Asp Gly Ala His Glu Arg Pro Gly Gly Asp Ala Thr Val Thr Ile Ser
          225          230          235          240
His Arg Tyr Thr Pro Lys Glu Gln Leu Lys Lys His Thr Ile Leu Ala
          245          250          255
Asp Ile Val Ile Ser Ala Ala Gly Ile Pro Asn Leu Ile Thr Ala Asp
          260          265          270
Met Ile Lys Glu Gly Ala Ala Val Ile Asp Val Gly Ile Asn Arg Val
          275          280          285
His Asp Pro Val Thr Ala Lys Pro Lys Leu Val Gly Asp Val Asp Phe
          290          295          300
Glu Gly Val Arg Gln Lys Ala Gly Tyr Ile Thr Pro Val Pro Gly Gly
          305          310          315          320
Val Gly Pro Met Thr Val Ala Met Leu Met Lys Asn Thr Ile Ile Ala
          325          330          335
Ala Lys Lys Val Leu Arg Leu Glu Glu Arg Glu Val Leu Lys Ser Lys
          340          345          350
Glu Leu Gly Val Ala Thr Asn
          355          359

```

<210> 3566

<211> 375

<212> PRT

<213> Homo sapiens

<400> 3566

```

Ser Cys Arg Arg Gly Arg Gln Gln Gln Arg Arg Asn Val Ser Leu Ser
 1          5          10          15
Ser Gln Phe Ala His Thr Met Ala Ala Pro Ala Gln Gln Thr Thr Gln
          20          25          30
Pro Gly Gly Gly Lys Arg Lys Gly Lys Ala Gln Tyr Val Leu Ala Lys
          35          40          45
Arg Ala Arg Arg Cys Asp Ala Gly Gly Pro Arg Gln Leu Glu Pro Gly

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<210> 3567
<211> 1083
<212> PRT
<213> Homo sapiens
```

5330

5331

610	615	620
Arg Arg Pro Ser Thr Ala Asp Gly Glu Gly Asp Glu Arg Pro Phe Thr		
625	630	635
Gln Ala Gly Leu Gly Ala Asp Glu Arg Ile Pro Glu Leu Glu Leu Pro		640
	645	650
Ser Ser Ser Pro Val Pro Gln Val Thr Thr Pro Glu Pro Gly Ile Tyr		655
	660	665
His Gly Ile Cys Leu Gln Leu Asn Phe Thr Ala Ser Trp Gly Asp Leu		670
	675	680
His Tyr Leu Gly Leu Thr Gly Leu Glu Val Val Gly Lys Glu Gly Gln		685
	690	695
Ala Leu Pro Ile His Leu His Gln Ile Ser Ala Ser Pro Arg Asp Leu		700
705	710	715
Asn Glu Leu Pro Glu Tyr Ser Asp Asp Ser Arg Thr Leu Asp Lys Leu		720
	725	730
Ile Asp Gly Thr Asn Ile Thr Met Glu Asp Glu His Met Trp Leu Ile		735
	740	745
Pro Phe Ser Pro Gly Leu Asp His Val Val Thr Ile Arg Leu Asp Arg		750
	755	760
Ala Glu Ser Ile Ala Gly Leu Arg Phe Trp Asn Tyr Asn Lys Ser Pro		765
	770	775
Glu Asp Thr Tyr Arg Gly Ala Lys Ile Val His Val Ser Leu Asp Gly		780
785	790	795
Leu Cys Val Ser Pro Pro Glu Gly Phe Leu Ile Arg Lys Gly Pro Gly		800
	805	810
Asn Cys His Phe Asp Phe Ala Gln Glu Ile Leu Phe Val Asp Tyr Leu		815
	820	825
Arg Ala Gln Leu Leu Pro Gln Pro Ala Arg Arg Leu Asp Met Arg Ser		830
	835	840
Leu Glu Cys Ala Ser Met Asp Tyr Glu Ala Pro Leu Met Pro Cys Gly		845
	850	855
Phe Ile Phe Gln Phe Gln Leu Leu Thr Ser Trp Gly Asp Pro Tyr Tyr		860
865	870	875
Ile Gly Leu Thr Gly Leu Glu Leu Tyr Asp Glu Arg Gly Glu Lys Ile		880
	885	890
Pro Leu Ser Glu Asn Asn Ile Ala Ala Phe Pro Asp Ser Val Asn Ser		895
	900	905
Leu Glu Gly Val Gly Gly Asp Val Arg Thr Pro Asp Lys Leu Ile Asp		910
	915	920
Gln Val Asn Asp Thr Ser Asp Gly Arg His Met Trp Leu Ala Pro Ile		925
	930	935
Leu Pro Gly Leu Val Asn Arg Val Tyr Val Ile Phe Asp Leu Pro Thr		940
945	950	955
Thr Val Ser Met Ile Lys Leu Trp Asn Tyr Ala Lys Thr Pro His Arg		960
	965	970
Gly Val Lys Glu Phe Gly Leu Leu Val Asp Asp Leu Leu Val Tyr Asn		975
	980	985
Gly Ile Leu Ala Met Val Ser His Leu Val Gly Gly Ile Leu Pro Thr		990
	995	1000
Cys Glu Pro Thr Val Pro Tyr His Thr Ile Leu Phe Thr Glu Asp Arg		1005
1010	1015	1020
Asp Ile Arg His Gln Glu Lys His Thr Thr Ile Ser Asn Gln Ala Glu		1025
1025	1030	1035
Asp Gln Asp Val Gln Met Met Asn Glu Asn Gln Ile Ile Thr Asn Ala		1040
	1045	1050
Lys Arg Lys Gln Ser Val Val Asp Pro Ala Leu Arg Pro Lys Thr Cys		1055
	1060	1065
Ile Ser Glu Lys Glu Thr Arg Arg Arg Arg Cys		1070
	1075	1080
		1083

<210> 3568

<211> 558

<212> PRT

<213> Homo sapiens

<400> 3568

Ala	Gln	Gly	Gly	Thr	Leu	Ser	Ala	Ala	Ser	Arg	Phe	Cys	Arg	Gly	Gly
1				5					10					15	
Leu	Leu	Gly	Pro	Trp	Leu	His	Pro	Ala	Ser	Glu	Met	Ala	Ala	Thr	Leu
			20					25					30		
Asp	Leu	Lys	Ser	Lys	Glu	Glu	Lys	Asp	Ala	Glu	Leu	Asp	Lys	Arg	Ile
		35					40					45			
Glu	Ala	Leu	Arg	Arg	Lys	Asn	Glu	Ala	Leu	Ile	Arg	Arg	Tyr	Gln	Glu
	50					55					60				
Ile	Glu	Glu	Asp	Arg	Lys	Lys	Ala	Glu	Leu	Glu	Gly	Val	Ala	Val	Thr
	65				70					75				80	
Ala	Pro	Arg	Lys	Gly	Arg	Ser	Val	Glu	Lys	Glu	Asn	Val	Ala	Val	Glu
				85					90					95	
Ser	Glu	Lys	Asn	Leu	Gly	Pro	Ser	Arg	Arg	Ser	Pro	Gly	Thr	Pro	Arg
			100					105					110		
Pro	Pro	Gly	Ala	Ser	Lys	Gly	Gly	Arg	Thr	Pro	Pro	Gln	Gln	Gly	Gly
		115					120						125		
Arg	Ala	Gly	Met	Gly	Arg	Ala	Ser	Arg	Ser	Trp	Glu	Gly	Ser	Pro	Gly
	130					135					140				
Glu	Gln	Pro	Arg	Gly	Gly	Gly	Ala	Gly	Gly	Arg	Gly	Arg	Arg	Gly	Arg
	145					150				155				160	
Gly	Arg	Gly	Ser	Pro	His	Leu	Ser	Gly	Ala	Gly	Asp	Thr	Ser	Ile	Ser
				165					170					175	
Asp	Arg	Lys	Ser	Lys	Glu	Trp	Glu	Glu	Arg	Arg	Arg	Gln	Asn	Ile	Glu
			180					185					190		
Lys	Met	Asn	Glu	Glu	Met	Glu	Lys	Ile	Ala	Glu	Tyr	Glu	Arg	Asn	Gln
		195				200						205			
Arg	Glu	Gly	Val	Leu	Glu	Pro	Asn	Pro	Val	Arg	Asn	Phe	Leu	Asp	Asp
	210					215					220				
Pro	Arg	Arg	Arg	Ser	Gly	Pro	Leu	Glu	Glu	Ser	Glu	Arg	Asp	Arg	Arg
	225					230				235				240	
Glu	Glu	Ser	Arg	Arg	His	Gly	Arg	Asn	Trp	Gly	Gly	Pro	Asp	Phe	Glu
				245					250					255	
Arg	Val	Arg	Cys	Gly	Leu	Glu	His	Glu	Arg	Gln	Gly	Arg	Arg	Ala	Gly
			260					265						270	
Leu	Gly	Ser	Ala	Gly	Asp	Met	Thr	Leu	Ser	Met	Thr	Gly	Arg	Glu	Arg
		275					280						285		
Ser	Glu	Tyr	Leu	Arg	Trp	Lys	Gln	Glu	Arg	Glu	Lys	Ile	Asp	Gln	Glu
	290					295					300				
Arg	Leu	Gln	Arg	His	Arg	Lys	Pro	Thr	Gly	Gln	Trp	Arg	Arg	Glu	Trp
	305					310				315				320	
Asp	Ala	Glu	Lys	Thr	Asp	Gly	Met	Phe	Lys	Asp	Gly	Pro	Val	Pro	Ala
				325					330					335	
His	Glu	Pro	Ser	His	Arg	Tyr	Asp	Asp	Gln	Ala	Trp	Ala	Arg	Pro	Pro
			340						345					350	
Lys	Pro	Pro	Thr	Phe	Gly	Glu	Phe	Leu	Ser	Gln	His	Lys	Ala	Glu	Ala
		355					360					365			
Ser	Ser	Arg	Arg	Arg	Arg	Lys	Ser	Ser	Arg	Pro	Gln	Ala	Lys	Ala	Ala
	370					375					380				
Pro	Arg	Ala	Tyr	Ser	Asp	His	Asp	Asp	Arg	Trp	Glu	Thr	Lys	Glu	Gly
	385					390				395				400	
Ala	Ala	Ser	Pro	Ala	Pro	Glu	Thr	Pro	Gln	Pro	Thr	Ser	Pro	Glu	Thr
				405					410					415	
Ser	Pro	Lys	Glu	Thr	Pro	Met	Gln	Pro	Pro	Glu	Ile	Pro	Ala	Pro	Ala
			420					425					430		
His	Arg	Pro	Pro	Glu	Asp	Glu	Gly	Glu	Glu	Asn	Glu	Gly	Glu	Glu	Asp
		435					440					445			
Glu	Glu	Trp	Glu	Asp	Ile	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Ile	Glu
	450					455					460				
Val	Glu	Glu	Gly	Asp	Glu	Glu	Glu	Pro	Ala	Gln	Asp	His	Gln	Ala	Pro

465 470 475 480
 Glu Ala Ala Pro Thr Gly Ile Pro Cys Ser Glu Gln Ala His Gly Val
 485 490 495
 Pro Phe Ser Pro Glu Glu Pro Leu Leu Glu Pro Gln Ala Pro Gly Thr
 500 505 510
 Pro Ser Ser Pro Phe Ser Pro Pro Ser Gly His Gln Pro Val Ser Asp
 515 520 525
 Trp Gly Glu Glu Val Glu Leu Asn Ser Pro Arg Thr Thr His Leu Ala
 530 535 540
 Gly Ala Leu Ser Pro Gly Glu Ala Trp Pro Phe Glu Ser Val
 545 550 555 558

<210> 3569

<211> 304

<212> PRT

<213> Homo sapiens

<400> 3569

Met Gly Arg Val Gly Arg Ala Gly Val Gln Leu Gly Arg Arg Arg Thr
 1 5 10 15
 Thr Trp Ala Ala Glu Arg Thr Gly Gln Ala Ala Ala Gly Gly Pro Gly
 20 25 30
 Arg Ala Leu Arg Gly Gln Arg Pro Asp Leu Arg Ser Gly Gly Ala Ala
 35 40 45
 Asp Ser Pro Ala Ala Gly Arg Gly Glu Leu Tyr Cys Gly Val Leu Pro
 50 55 60
 Arg Ser Pro Trp Phe Leu Ser Glu Arg Arg Arg Gln Met Ala Asp Phe
 65 70 75 80
 Asp Thr Tyr Asp Asp Arg Ala Tyr Ser Ser Phe Gly Gly Gly Arg Gly
 85 90 95
 Ser Arg Gly Ser Ala Gly Gly His Gly Ser Arg Ser Gln Lys Glu Leu
 100 105 110
 Pro Thr Glu Pro Pro Tyr Thr Ala Tyr Val Gly Asn Leu Pro Phe Asn
 115 120 125
 Thr Val Gln Gly Asp Ile Asp Ala Ile Phe Lys Asp Leu Ser Ile Arg
 130 135 140
 Ser Val Arg Leu Val Arg Asp Lys Asp Thr Asp Lys Phe Lys Gly Phe
 145 150 155 160
 Cys Tyr Val Glu Phe Asp Glu Val Asp Ser Leu Lys Glu Ala Leu Thr
 165 170 175
 Tyr Asp Gly Ala Leu Leu Gly Asp Arg Ser Leu Arg Val Asp Ile Ala
 180 185 190
 Glu Gly Arg Lys Gln Asp Lys Gly Gly Phe Gly Phe Arg Lys Gly Gly
 195 200 205
 Pro Asp Asp Arg Gly Phe Arg Asp Asp Phe Leu Gly Gly Arg Gly Gly
 210 215 220
 Ser Arg Pro Gly Asp Arg Arg Thr Gly Pro Pro Met Gly Ser Arg Phe
 225 230 235 240
 Arg Asp Gly Pro Pro Leu Arg Gly Ser Asn Met Asp Phe Arg Glu Pro
 245 250 255
 Thr Glu Glu Glu Arg Ala Gln Arg Pro Arg Leu Gln Leu Lys Pro Arg
 260 265 270
 Thr Val Ala Thr Pro Leu Asn Gln Val Ala Asn Pro Asn Ser Ala Ile
 275 280 285
 Phe Gly Gly Ala Arg Pro Arg Glu Glu Val Val Gln Lys Glu Gln Glu
 290 295 300 304

<210> 3570
 <211> 304
 <212> PRT
 <213> Homo sapiens

<400> 3570
 Met Gly Arg Val Gly Arg Ala Gly Val Gln Leu Gly Arg Arg Arg Thr
 1 5 10 15
 Thr Trp Ala Ala Glu Arg Thr Gly Gln Ala Ala Ala Gly Gly Pro Gly
 20 25 30
 Arg Ala Leu Arg Gly Gln Arg Pro Asp Leu Arg Ser Gly Gly Ala Ala
 35 40 45
 Asp Ser Pro Ala Ala Gly Arg Gly Glu Leu Tyr Cys Gly Val Leu Pro
 50 55 60
 Arg Ser Pro Trp Phe Leu Ser Glu Arg Arg Arg Gln Met Ala Asp Phe
 65 70 75 80
 Asp Thr Tyr Asp Asp Arg Ala Tyr Ser Ser Phe Gly Gly Gly Arg Gly
 85 90 95
 Ser Arg Gly Ser Ala Gly Gly His Gly Ser Arg Ser Gln Lys Glu Leu
 100 105 110
 Pro Thr Glu Pro Pro Tyr Thr Ala Tyr Val Gly Asn Leu Pro Phe Asn
 115 120 125
 Thr Val Gln Gly Asp Ile Asp Ala Ile Phe Lys Asp Leu Ser Ile Arg
 130 135 140
 Ser Val Arg Leu Val Arg Asp Lys Asp Thr Asp Lys Phe Lys Gly Phe
 145 150 155 160
 Cys Tyr Val Glu Phe Asp Glu Val Asp Ser Leu Lys Glu Ala Leu Thr
 165 170 175
 Tyr Asp Gly Ala Leu Leu Gly Asp Arg Ser Leu Arg Val Asp Ile Ala
 180 185 190
 Glu Gly Arg Lys Gln Asp Lys Gly Gly Phe Gly Phe Arg Lys Gly Gly
 195 200 205
 Pro Asp Asp Arg Gly Phe Arg Asp Asp Phe Leu Gly Gly Arg Gly Gly
 210 215 220
 Ser Arg Pro Gly Asp Arg Arg Thr Gly Pro Pro Met Gly Ser Arg Phe
 225 230 235 240
 Arg Asp Gly Pro Pro Leu Arg Gly Ser Asn Met Asp Phe Arg Glu Pro
 245 250 255
 Thr Glu Glu Glu Arg Ala Gln Arg Pro Arg Leu Gln Leu Lys Pro Arg
 260 265 270
 Thr Val Ala Thr Pro Leu Asn Gln Val Ala Asn Pro Asn Ser Ala Ile
 275 280 285
 Phe Gly Gly Ala Arg Pro Arg Glu Glu Val Val Gln Lys Glu Gln Glu
 290 295 300 304

<210> 3571
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 3571
 Arg His Phe Phe Gly Asn Leu Cys Ala Met Arg Ala Lys Trp Arg Lys
 1 5 10 15
 Lys Arg Met Arg Arg Leu Lys Arg Lys Arg Arg Lys Met Arg Gln Arg
 20 25 30
 Ser Lys
 34

<210> 3572
 <211> 399
 <212> PRT
 <213> Homo sapiens

<400> 3572
 Gln Ser Glu Pro His Arg Lys Val Arg Val Asp Pro Pro Val Arg Asp
 1 5 10 15
 Arg Pro Pro Pro His Pro Pro Pro Leu Leu Val Gln Arg Ala Leu Pro
 20 25 30
 Gly Gln Gly Gln Ala Glu Gly Ser Asp Gly Ala Asp Gly Ala Lys Arg
 35 40 45
 Arg Ala Met Ala His Gln Thr Gly Ile His Ala Thr Glu Glu Leu Lys
 50 55 60
 Glu Phe Phe Ala Lys Ala Arg Ala Gly Ser Val Arg Leu Ile Lys Val
 65 70 75 80
 Val Ile Glu Asp Glu Gln Leu Val Leu Gly Ala Ser Gln Glu Pro Val
 85 90 95
 Gly Arg Trp Asp Gln Asp Tyr Asp Arg Ala Val Leu Pro Leu Leu Asp
 100 105 110
 Ala Gln Gln Pro Cys Tyr Leu Leu Tyr Arg Leu Asp Ser Gln Asn Ala
 115 120 125
 Gln Gly Phe Glu Trp Leu Phe Leu Ala Trp Ser Pro Asp Asn Ser Pro
 130 135 140
 Val Arg Leu Lys Met Leu Tyr Ala Ala Thr Arg Ala Thr Val Lys Lys
 145 150 155 160
 Glu Phe Gly Gly Gly His Ile Lys Asp Glu Leu Phe Gly Thr Val Lys
 165 170 175
 Asp Asp Leu Ser Phe Ala Gly Tyr Gln Lys His Leu Ser Ser Cys Ala
 180 185 190
 Ala Pro Ala Pro Leu Thr Ser Ala Glu Arg Glu Leu Gln Gln Ile Arg
 195 200 205
 Ile Asn Glu Val Lys Thr Glu Ile Ser Val Glu Ser Lys His Gln Thr
 210 215 220
 Leu Gln Gly Leu Ala Phe Pro Leu Gln Pro Glu Ala Gln Arg Ala Leu
 225 230 235 240
 Gln Gln Leu Lys Gln Lys Met Val Asn Tyr Ile Gln Met Lys Leu Asp
 245 250 255
 Leu Glu Arg Glu Thr Ile Glu Leu Val His Thr Glu Pro Thr Asp Val
 260 265 270
 Ala Gln Leu Pro Ser Arg Val Pro Arg Asp Ala Ala Arg Tyr His Phe
 275 280 285
 Phe Leu Tyr Lys His Thr His Glu Gly Asp Pro Leu Glu Ser Val Val
 290 295 300
 Phe Ile Tyr Ser Met Pro Gly Tyr Lys Cys Ser Ile Lys Glu Arg Met
 305 310 315 320
 Leu Tyr Ser Ser Cys Lys Ser Arg Leu Leu Asp Ser Val Glu Gln Asp
 325 330 335
 Phe His Leu Glu Ile Ala Lys Lys Ile Glu Ile Gly Asp Gly Ala Glu
 340 345 350
 Leu Thr Ala Glu Phe Leu Tyr Asp Glu Val His Pro Lys Gln His Ala
 355 360 365
 Phe Lys Gln Ala Phe Ala Lys Pro Lys Gly Pro Gly Gly Lys Arg Gly
 370 375 380
 His Lys Arg Leu Ile Arg Gly Pro Gly Glu Asn Gly Asp Asp Ser
 385 390 395 399

<210> 3573
 <211> 607

<212> PRT

<213> Homo sapiens

<400> 3573

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Pro His Cys Glu   Pro Asn Pro Gly Ala Gly Ala Met Val Leu Leu His
 1          5          10          15
Val Leu Phe Glu His Ala Val Gly Tyr Ala Leu Leu Ala Leu Lys Glu
          20          25          30
Val Glu Glu Ile Ser Leu Leu Gln Pro Gln Val Glu Glu Ser Val Leu
          35          40          45
Asn Leu Gly Lys Phe His Ser Ile Val Arg Leu Val Ala Phe Cys Pro
          50          55          60
Phe Ala Ser Ser Gln Val Ala Leu Glu Asn Ala Asn Ala Val Ser Glu
          65          70          75          80
Gly Val Val His Glu Asp Leu Arg Leu Leu Leu Glu Thr His Leu Pro
          85          90          95
Ser Lys Lys Lys Lys Val Leu Leu Gly Val Gly Asp Pro Lys Ile Gly
          100          105          110
Ala Ala Ile Gln Glu Glu Leu Gly Tyr Asn Cys Gln Thr Gly Gly Val
          115          120          125
Ile Ala Glu Ile Leu Arg Gly Val Arg Leu His Phe His Asn Leu Val
          130          135          140
Lys Gly Leu Thr Asp Leu Ser Ala Cys Lys Ala Gln Leu Gly Leu Gly
          145          150          155          160
His Ser Tyr Ser Arg Ala Lys Val Lys Phe Asn Val Asn Arg Val Asp
          165          170          175
Asn Met Ile Ile Gln Ser Ile Ser Leu Leu Asp Gln Leu Asp Lys Asp
          180          185          190
Ile Asn Thr Phe Ser Met Arg Val Arg Glu Trp Tyr Gly Tyr His Phe
          195          200          205
Pro Glu Leu Val Lys Ile Ile Asn Asp Asn Ala Thr Tyr Cys Arg Leu
          210          215          220
Ala Gln Phe Ile Gly Asn Arg Arg Glu Leu Asn Glu Asp Lys Leu Glu
          225          230          235          240
Lys Leu Glu Glu Leu Thr Met Asp Gly Ala Lys Ala Lys Ala Ile Leu
          245          250          255
Asp Ala Ser Arg Ser Ser Met Gly Met Asp Ile Ser Ala Ile Asp Leu
          260          265          270
Ile Asn Ile Glu Ser Phe Ser Ser Arg Val Val Ser Leu Ser Glu Tyr
          275          280          285
Arg Gln Ser Leu His Thr Tyr Leu Arg Ser Lys Met Ser Gln Val Ala
          290          295          300
Pro Ser Leu Ser Ala Leu Ile Gly Glu Ala Val Gly Ala Arg Leu Ile
          305          310          315          320
Ala His Ala Gly Ser Leu Thr Asn Leu Ala Lys Tyr Pro Ala Ser Thr
          325          330          335
Val Gln Ile Leu Gly Ala Glu Lys Ala Leu Phe Arg Ala Leu Lys Thr
          340          345          350
Arg Gly Asn Thr Pro Lys Tyr Gly Leu Ile Phe His Ser Thr Phe Ile
          355          360          365
Gly Arg Ala Ala Ala Lys Asn Lys Gly Arg Ile Ser Arg Tyr Leu Ala
          370          375          380
Asn Lys Cys Ser Ile Ala Ser Arg Ile Asp Cys Phe Ser Glu Val Pro
          385          390          395          400
Thr Ser Val Phe Gly Glu Lys Leu Arg Glu Gln Val Glu Glu Arg Leu
          405          410          415
Ser Phe Tyr Glu Thr Gly Glu Ile Pro Arg Lys Asn Leu Asp Val Met
          420          425          430
Lys Glu Ala Met Val Gln Ala Glu Ala Glu Glu Ala Ala Glu Ile
          435          440          445
Thr Arg Lys Leu Glu Lys Gln Glu Lys Lys Arg Leu Lys Lys Glu Lys
          450          455          460
Lys Arg Leu Ala Ala Leu Ala Leu Ala Ser Ser Glu Asn Ser Ser Ser

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465		470		475		480									
Thr	Pro	Glu	Glu	Cys	Glu	Glu	Thr	Ser	Glu	Lys	Pro	Lys	Lys	Lys	Lys
		485				490								495	
Lys	Gln	Lys	Pro	Gln	Glu	Val	Pro	Gln	Glu	Asn	Gly	Met	Glu	Asp	Pro
		500				505								510	
Ser	Ile	Ser	Phe	Ser	Lys	Pro	Lys	Lys	Lys	Ser	Phe	Ser	Lys	Glu	
		515				520								525	
Glu	Leu	Met	Ser	Ser	Asp	Leu	Glu	Glu	Thr	Ala	Gly	Ser	Thr	Ser	Ile
		530				535								540	
Pro	Lys	Arg	Lys	Lys	Ser	Thr	Pro	Lys	Glu	Glu	Thr	Val	Asn	Asp	Pro
		545				550								555	
Glu	Glu	Ala	Gly	His	Arg	Ser	Arg	Ser	Lys	Lys	Lys	Arg	Lys	Phe	Ser
				565										570	
Lys	Glu	Glu	Pro	Val	Ser	Ser	Gly	Pro	Glu	Glu	Ala	Val	Gly	Lys	Ser
				580										590	
Ser	Ser	Lys	Lys	Lys	Lys	Lys	Phe	His	Lys	Ala	Ser	Gln	Glu	Asp	
		595					600					605		607	

<210> 3574
 <211> 582
 <212> PRT
 <213> Homo sapiens

<400> 3574

Cys	Gly	Asn	Glu	Arg	Thr	Ala	Arg	Leu	Trp	Val	Gln	Pro	Val	Val	Ser
1				5					10					15	
Thr	Met	Pro	Gln	Ala	Ser	Glu	His	Arg	Leu	Gly	Arg	Thr	Arg	Glu	Pro
			20					25					30		
Pro	Val	Asn	Ile	Gln	Pro	Arg	Val	Gly	Ser	Lys	Leu	Pro	Phe	Ala	Pro
		35					40					45			
Arg	Ala	Arg	Ser	Lys	Glu	Arg	Asn	Pro	Ala	Ser	Gly	Pro	Asn	Pro	
		50				55					60				
Met	Leu	Arg	Pro	Leu	Pro	Pro	Arg	Pro	Gly	Leu	Pro	Asp	Glu	Arg	Leu
		65			70				75					80	
Lys	Lys	Leu	Glu	Leu	Gly	Arg	Gly	Arg	Thr	Ser	Gly	Pro	Arg	Pro	Arg
				85					90					95	
Gly	Pro	Leu	Arg	Ala	Asp	His	Gly	Val	Pro	Leu	Pro	Gly	Ser	Pro	Pro
		100						105					110		
Pro	Thr	Val	Ala	Leu	Pro	Leu	Pro	Ser	Arg	Thr	Asn	Leu	Ala	Arg	Ser
		115					120					125			
Lys	Ser	Val	Ser	Ser	Gly	Asp	Leu	Arg	Pro	Met	Gly	Ile	Ala	Leu	Gly
		130				135					140				
Gly	His	Arg	Gly	Thr	Gly	Glu	Leu	Gly	Ala	Ala	Leu	Ser	Arg	Leu	Ala
		145				150				155				160	
Leu	Arg	Pro	Glu	Pro	Pro	Thr	Leu	Arg	Arg	Ser	Thr	Ser	Leu	Arg	Arg
				165					170					175	
Leu	Gly	Gly	Phe	Pro	Gly	Pro	Pro	Thr	Leu	Phe	Ser	Ile	Arg	Thr	Glu
			180					185					190		
Pro	Pro	Ala	Ser	His	Gly	Ser	Phe	His	Met	Ile	Ser	Ala	Arg	Ser	Ser
		195					200					205			
Glu	Pro	Phe	Tyr	Ser	Asp	Asp	Lys	Met	Ala	His	His	Thr	Leu	Leu	Leu
		210				215					220				
Gly	Ser	Gly	His	Val	Gly	Leu	Arg	Asn	Leu	Gly	Asn	Thr	Cys	Phe	Leu
		225				230				235				240	
Asn	Ala	Val	Leu	Gln	Cys	Leu	Ser	Ser	Thr	Arg	Pro	Leu	Arg	Asp	Phe
				245					250					255	
Cys	Leu	Arg	Arg	Asp	Phe	Arg	Gln	Glu	Val	Pro	Gly	Gly	Gly	Arg	Ala
			260					265					270		
Gln	Glu	Leu	Thr	Glu	Ala	Phe	Ala	Asp	Val	Ile	Gly	Ala	Leu	Trp	His
			275					280					285		
Pro	Asp	Ser	Cys	Glu	Ala	Val	Asn	Pro	Thr	Arg	Phe	Arg	Ala	Val	Phe

290 295 300
 Gln Lys Tyr Val Pro Ser Phe Ser Gly Tyr Ser Gln Gln Asp Ala Gln
 305 310 315 320
 Glu Phe Leu Lys Leu Leu Met Glu Arg Leu His Leu Glu Ile Asn Arg
 325 330 335
 Arg Gly Arg Arg Ala Pro Pro Ile Leu Ala Asn Gly Pro Val Pro Ser
 340 345 350
 Pro Pro Arg Arg Gly Gly Ala Leu Leu Glu Glu Pro Glu Leu Ser Asp
 355 360 365
 Asp Asp Arg Ala Asn Leu Met Trp Lys Arg Tyr Leu Glu Arg Glu Asp
 370 375 380
 Ser Lys Ile Val Asp Leu Phe Val Gly Gln Leu Lys Ser Cys Leu Lys
 385 390 395 400
 Cys Gln Ala Cys Gly Tyr Arg Ser Thr Thr Phe Glu Val Phe Cys Asp
 405 410 415
 Leu Ser Leu Pro Ile Pro Lys Lys Gly Phe Ala Gly Gly Lys Val Ser
 420 425 430
 Leu Arg Asp Cys Phe Asn Leu Phe Thr Lys Glu Glu Glu Leu Glu Ser
 435 440 445
 Glu Asn Ala Pro Val Cys Asp Arg Cys Arg Gln Lys Thr Arg Ser Thr
 450 455 460
 Lys Lys Leu Thr Val Gln Arg Phe Pro Arg Ile Leu Val Leu His Leu
 465 470 475 480
 Asn Arg Phe Ser Ala Ser Arg Gly Ser Ile Lys Lys Ser Ser Val Gly
 485 490 495
 Val Asp Phe Pro Leu Gln Arg Leu Ser Leu Gly Asp Phe Ala Ser Asp
 500 505 510
 Lys Ala Gly Ser Pro Val Tyr Gln Leu Tyr Ala Leu Cys Asn His Ser
 515 520 525
 Gly Ser Val His Tyr Gly His Tyr Thr Ala Leu Cys Arg Cys Gln Thr
 530 535 540
 Gly Trp His Val Tyr Asn Asp Ser Arg Val Ser Pro Val Ser Glu Asn
 545 550 555 560
 Gln Val Ala Ser Ser Glu Gly Tyr Val Leu Phe Tyr Gln Leu Met Gln
 565 570 575
 Glu Pro Pro Arg Cys Leu
 580 582

<210> 3575

<211> 802

<212> PRT

<213> Homo sapiens

<400> 3575

Arg Glu Leu Asp Ser Leu Ala Asp Leu Pro Glu Arg Ile Lys Pro Pro
 1 5 10 15
 Tyr Ala Asn Gly Leu Ser Thr Ser His Leu Arg Ser Ser Ser Val Glu
 20 25 30
 Asp Val Lys Leu Ile Ile Ser Glu Gly Arg Pro Thr Ile Glu Val Arg
 35 40 45
 Arg Cys Ser Met Pro Ser Val Ile Cys Glu His Thr Lys Gln Phe Gln
 50 55 60
 Thr Ile Ser Glu Glu Ser Asn Gln Gly Ser Leu Leu Thr Val Pro Gly
 65 70 75 80
 Asp Thr Ser Pro Ser Pro Lys Pro Glu Val Phe Ser Asn Val Pro Glu
 85 90 95
 Arg Asp Leu Ser Asn Val Ser Asn Ile His Ser Ser Phe Ala Thr Ser
 100 105 110
 Pro Thr Gly Ala Ser Asn Ser Lys Tyr Val Ser Ala Asp Arg Asn Leu
 115 120 125
 Ile Lys Asn Thr Ala Pro Val Asn Thr Val Met Asp Ser Pro Val His

130	135	140
Leu Glu Pro Ser Ser Gln Val Gly Val Ile Gln Asn Lys Ser Trp Glu		
145	150	155
Met Pro Val Asp Arg Leu Glu Thr Leu Ser Thr Arg Asp Phe Ile Cys		160
	165	170
Pro Asn Ser Asn Ile Pro Asp Gln Glu Ser Ser Leu Gln Ser Phe Cys		175
	180	185
Asn Ser Glu Asn Lys Val Leu Lys Glu Asn Ala Asp Phe Leu Ser Leu		190
	195	200
Arg Gln Thr Glu Leu Pro Gly Asn Ser Cys Ala Gln Asp Pro Ala Ser		205
	210	215
Phe Met Pro Pro Gln Gln Pro Cys Ser Phe Pro Ser Gln Ser Leu Ser		220
225	230	235
Asp Ala Glu Ser Ile Ser Lys His Met Ser Leu Ser Tyr Val Ala Asn		240
	245	250
Gln Glu Pro Gly Ile Leu Gln Gln Lys Asn Ala Val Gln Ile Ile Ser		255
	260	265
Ser Ala Leu Asp Thr Asp Asn Glu Ser Thr Lys Asp Thr Glu Asn Thr		270
	275	280
Phe Val Leu Gly Asp Val Gln Lys Thr Asp Ala Phe Val Pro Val Tyr		285
	290	295
Ser Asp Ser Thr Ile Gln Glu Ala Ser Pro Asn Phe Glu Lys Ala Tyr		300
305	310	315
Thr Leu Pro Val Leu Pro Ser Glu Lys Asp Phe Asn Gly Ser Asp Ala		320
	325	330
Ser Thr Gln Leu Asn Thr His Tyr Ala Phe Ser Lys Leu Thr Tyr Lys		335
	340	345
Ser Ser Ser Gly His Glu Val Glu Asn Ser Thr Thr Asp Thr Gln Val		350
	355	360
Ile Ser His Glu Lys Glu Asn Lys Leu Glu Ser Leu Val Leu Thr His		365
	370	375
Leu Ser Arg Cys Asp Ser Asp Leu Cys Glu Met Asn Ala Gly Met Pro		380
385	390	395
Lys Gly Asn Leu Asn Glu Gln Asp Pro Lys His Cys Pro Glu Ser Glu		400
	405	410
Lys Cys Leu Leu Ser Ile Glu Asp Glu Glu Ser Gln Gln Ser Ile Leu		415
	420	425
Ser Ser Leu Glu Asn His Ser Gln Gln Ser Thr Gln Pro Glu Met His		430
	435	440
Lys Tyr Gly Gln Leu Val Lys Val Glu Leu Glu Glu Asn Ala Glu Asp		445
	450	455
Asp Lys Thr Glu Asn Gln Ile Pro Gln Arg Met Thr Arg Asn Lys Ala		460
465	470	475
Asn Thr Met Ala Asn Gln Ser Lys Gln Ile Leu Ala Ser Cys Thr Leu		480
	485	490
Leu Ser Glu Lys Asp Ser Glu Ser Ser Ser Pro Arg Gly Arg Ile Arg		495
	500	505
Leu Thr Glu Asp Asp Asp Pro Gln Ile His His Pro Arg Lys Arg Lys		510
	515	520
Val Ser Arg Val Pro Gln Pro Val Gln Val Ser Pro Ser Leu Leu Gln		525
	530	535
Ala Lys Glu Lys Thr Gln Gln Ser Leu Ala Ala Ile Val Asp Ser Leu		540
545	550	555
Lys Leu Asp Glu Ile Gln Pro Tyr Ser Ser Glu Arg Ala Asn Pro Tyr		560
	565	570
Phe Glu Tyr Leu His Ile Arg Lys Lys Ile Glu Glu Lys Arg Lys Leu		575
	580	585
Leu Cys Ser Val Ile Pro Gln Ala Pro Gln Tyr Tyr Asp Glu Tyr Val		590
	595	600
Thr Phe Asn Gly Ser Tyr Leu Leu Asp Gly Asn Pro Leu Ser Lys Ile		605
	610	615
Cys Ile Pro Thr Ile Thr Pro Pro Pro Ser Leu Ser Asp Pro Leu Lys		620
625	630	635
Glu Leu Phe Arg Gln Gln Glu Val Val Arg Met Lys Leu Arg Leu Gln		640

				645					650					655	
His	Ser	Ile	Glu	Arg	Glu	Lys	Leu	Ile	Val	Ser	Asn	Glu	Gln	Glu	Val
			660					665					670		
Leu	Arg	Val	His	Tyr	Arg	Ala	Ala	Arg	Thr	Leu	Ala	Asn	Gln	Thr	Leu
		675					680					685			
Pro	Phe	Ser	Ala	Cys	Thr	Val	Leu	Leu	Asp	Ala	Glu	Val	Tyr	Asn	Val
	690					695					700				
Pro	Leu	Asp	Ser	Gln	Ser	Asp	Asp	Ser	Lys	Thr	Ser	Val	Arg	Asp	Arg
	705				710					715				720	
Phe	Asn	Ala	Arg	Gln	Phe	Met	Ser	Trp	Leu	Gln	Asp	Val	Asp	Asp	Lys
			725						730					735	
Phe	Asp	Lys	Leu	Lys	Thr	Cys	Leu	Leu	Met	Arg	Gln	Gln	His	Glu	Ala
			740					745					750		
Ala	Ala	Leu	Asn	Ala	Val	Gln	Arg	Leu	Glu	Trp	Gln	Leu	Lys	Leu	Gln
		755				760					765				
Glu	Leu	Asp	Pro	Ala	Thr	Tyr	Lys	Ser	Ile	Ser	Ile	Tyr	Glu	Ile	Gln
	770					775					780				
Glu	Phe	Tyr	Val	Pro	Leu	Val	Asp	Val	Asn	Asp	Asp	Phe	Glu	Leu	Thr
	785				790				795					800	
Pro	Ile														
	802														

<210> 3576
 <211> 472
 <212> PRT
 <213> Homo sapiens

<400> 3576

Leu	Arg	Leu	Ala	Trp	His	Asp	Gly	Ala	Arg	Trp	Pro	Leu	Gly	Thr	Pro
1				5					10					15	
Arg	Ala	Ala	Ala	Thr	Arg	Arg	Glu	Ala	Ala	Ala	Leu	Pro	Pro	Val	Thr
			20					25					30		
Leu	Ala	Leu	Leu	Cys	Leu	Asp	Gly	Val	Phe	Leu	Ser	Ser	Ala	Glu	Asn
		35					40					45			
Asp	Phe	Val	His	Arg	Ile	Gln	Glu	Glu	Leu	Asp	Arg	Phe	Leu	Leu	Gln
	50					55					60				
Lys	Gln	Leu	Ser	Lys	Val	Leu	Leu	Phe	Pro	Pro	Leu	Ser	Ser	Arg	Leu
	65				70					75					80
Arg	Tyr	Leu	Ile	His	Arg	Thr	Ala	Glu	Asn	Phe	Asp	Leu	Leu	Ser	Ser
				85					90					95	
Phe	Ser	Val	Gly	Glu	Gly	Trp	Lys	Arg	Arg	Thr	Val	Ile	Cys	His	Gln
			100					105					110		
Asp	Ile	Arg	Val	Pro	Ser	Ser	Asp	Gly	Leu	Ser	Gly	Pro	Cys	Arg	Ala
		115					120					125			
Pro	Ala	Ser	Cys	Pro	Ser	Arg	Tyr	His	Gly	Pro	Arg	Pro	Ile	Ser	Asn
	130					135					140				
Gln	Gly	Ala	Ala	Ala	Val	Pro	Arg	Gly	Ala	Arg	Ala	Gly	Arg	Trp	Tyr
	145				150				155					160	
Arg	Gly	Arg	Lys	Pro	Asp	Gln	Pro	Leu	Tyr	Val	Pro	Arg	Val	Leu	Arg
			165						170					175	
Arg	Gln	Glu	Glu	Trp	Gly	Leu	Thr	Ser	Thr	Ser	Val	Leu	Lys	Arg	Glu
			180					185					190		
Ala	Pro	Ala	Gly	Arg	Asp	Pro	Glu	Pro	Gly	Asp	Val	Gly	Ala	Gly	
		195					200				205				
Asp	Pro	Asn	Ser	Asp	Gln	Gly	Leu	Pro	Val	Leu	Met	Thr	Gln	Gly	Thr
	210					215					220				
Glu	Asp	Leu	Lys	Gly	Pro	Gly	Gln	Arg	Cys	Glu	Asn	Glu	Pro	Leu	Leu
	225					230				235				240	
Asp	Pro	Val	Gly	Pro	Glu	Pro	Leu	Gly	Pro	Glu	Ser	Gln	Ser	Gly	Lys
			245					250					255		
Gly	Asp	Met	Val	Glu	Met	Ala	Thr	Arg	Phe	Gly	Ser	Thr	Leu	Gln	Leu

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      260      265      270
Asp Leu Glu Lys Gly Lys Glu Ser Leu Leu Glu Lys Arg Leu Val Ala
      275      280      285
Glu Glu Glu Glu Asp Glu Glu Glu Val Glu Glu Asp Gly Pro Ser Ser
      290      295      300
Cys Ser Glu Asp Asp Tyr Ser Glu Leu Leu Gln Glu Ile Thr Asp Asn
305      310      315      320
Leu Thr Lys Lys Glu Ile Gln Ile Glu Lys Ile His Leu Asp Thr Ser
      325      330      335
Ser Phe Met Glu Glu Leu Pro Gly Glu Lys Asp Leu Ala His Val Val
      340      345      350
Glu Ile Tyr Asp Phe Glu Pro Ala Leu Lys Thr Glu Asp Leu Leu Ala
      355      360      365
Thr Phe Ser Glu Phe Gln Glu Lys Gly Phe Arg Ile Gln Trp Val Asp
      370      375      380
Asp Thr His Ala Leu Gly Ile Phe Pro Cys Arg Ala Ser Ala Ala Glu
385      390      395      400
Ala Leu Thr Arg Glu Phe Ser Val Leu Lys Ile Arg Pro Leu Thr Gln
      405      410      415
Gly Thr Lys Gln Ser Lys Leu Lys Ala Leu Gln Arg Pro Lys Leu Leu
      420      425      430
Arg Leu Val Lys Glu Arg Pro Gln Thr Asn Ala Thr Val Ala Arg Arg
      435      440      445
Leu Val Ala Arg Ala Leu Gly Leu Gln His Lys Lys Lys Glu Arg Pro
450      455      460
Ala Val Arg Gly Pro Leu Pro Pro
465      470      472

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<210> 3577

<211> 631

<212> PRT

<213> Homo sapiens

<400> 3577

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Asp Thr Arg Thr Pro Gly Ser Leu Glu Met Gly Pro Leu Gln Phe Arg
 1      5      10      15
Asp Val Ala Ile Glu Phe Ser Leu Glu Trp His Cys Leu Asp Thr
      20      25      30
Ala Gln Arg Asn Leu Tyr Arg Asn Val Met Leu Glu Asn Tyr Ser Asn
      35      40      45
Leu Val Phe Leu Gly Ile Val Val Ser Lys Pro Asp Leu Ile Ala His
      50      55      60
Leu Glu Gln Gly Lys Lys Pro Leu Thr Met Lys Arg His Glu Met Val
      65      70      75      80
Ala Asn Pro Ser Gly Pro Val Ile Cys Ser His Phe Ala Gln Asp Leu
      85      90      95
Trp Pro Glu Gln Asn Ile Lys Asp Ser Phe Gln Lys Val Ile Leu Arg
      100      105      110
Arg Tyr Glu Lys Arg Gly His Gly Asn Leu Gln Leu Ile Lys Arg Cys
      115      120      125
Glu Ser Val Asp Glu Cys Lys Val His Thr Gly Gly Tyr Asn Gly Leu
      130      135      140
Asn Gln Cys Ser Thr Thr Thr Gln Ser Lys Val Phe Gln Cys Asp Lys
145      150      155      160
Tyr Gly Lys Val Phe His Lys Phe Ser Asn Ser Asn Arg His Asn Ile
      165      170      175
Arg His Thr Glu Lys Lys Pro Phe Lys Cys Ile Glu Cys Gly Lys Ala
      180      185      190
Phe Asn Gln Phe Ser Thr Leu Ile Thr His Lys Lys Ile His Thr Gly
      195      200      205
Glu Lys Pro Tyr Ile Cys Glu Glu Cys Gly Lys Ala Phe Lys Tyr Ser

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210	215	220
Ser Ala Leu Asn Thr His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr		
225	230	235
Lys Cys Asp Lys Cys Asp Lys Ala Phe Ile Ala Ser Ser Thr Leu Ser		240
	245	250
Lys His Glu Ile Ile His Thr Gly Lys Lys Pro Tyr Lys Cys Glu Glu		255
	260	265
Cys Gly Lys Ala Phe Asn Gln Ser Ser Thr Leu Thr Lys His Lys Lys		270
	275	280
Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala		285
	290	295
Phe Asn Gln Ser Ser Thr Leu Thr Lys His Lys Lys Ile His Thr Gly		300
305	310	315
Glu Lys Pro Tyr Val Cys Glu Glu Cys Gly Lys Ala Phe Lys Tyr Ser		320
	325	330
Arg Ile Leu Thr Thr His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr		335
	340	345
Lys Cys Asn Lys Cys Gly Lys Ala Phe Ile Ala Ser Ser Thr Leu Ser		350
	355	360
Arg His Glu Phe Ile His Met Gly Lys Lys His Tyr Lys Cys Glu Glu		365
	370	375
Cys Gly Lys Ala Phe Ile Trp Ser Ser Val Leu Thr Arg His Lys Arg		380
385	390	395
Val His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala		400
	405	410
Phe Lys Tyr Ser Ser Thr Leu Ser Ser His Lys Arg Ser His Thr Gly		415
	420	425
Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Val Ala Ser		430
	435	440
Ser Thr Leu Ser Lys His Glu Ile Ile His Thr Gly Lys Lys Pro Tyr		445
	450	455
Lys Cys Glu Glu Cys Gly Lys Ala Phe Asn Gln Ser Ser Ser Leu Thr		460
465	470	475
Lys His Lys Lys Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu		480
	485	490
Cys Gly Lys Ala Phe Asn Gln Ser Ser Ser Leu Thr Lys His Lys Lys		495
	500	505
Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala		510
	515	520
Phe Asn Gln Ser Ser Thr Leu Ile Lys His Lys Lys Ile His Thr Arg		525
	530	535
Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe His Leu Ser		540
545	550	555
Thr His Leu Thr Thr His Lys Ile Leu His Thr Gly Glu Lys Pro Tyr		560
	565	570
Arg Cys Arg Glu Cys Gly Lys Ala Phe Asn His Ser Ala Thr Leu Ser		575
	580	585
Ser His Lys Lys Ile His Ser Gly Glu Lys Pro Tyr Glu Cys Asp Lys		590
	595	600
Cys Gly Lys Ala Phe Ile Ser Pro Ser Ser Leu Ser Arg His Glu Ile		605
	610	615
Ile His Thr Gly Glu Lys Pro		620
625	630	631

<210> 3578

<211> 427

<212> PRT

<213> Homo sapiens

<400> 3578

Arg Pro Arg Arg Arg Gly Thr His His Phe Ser Cys Val Leu Gly Ser

1	5	10	15
Phe Arg Val Ser Ala Met Phe Pro Arg Val Ser Thr Phe Leu Pro Leu			
20	25	30	
Arg Pro Leu Ser Arg His Pro Leu Ser Ser Gly Ser Pro Glu Thr Ser			
35	40	45	
Ala Ala Ala Ile Met Leu Leu Thr Val Arg His Gly Thr Val Arg Tyr			
50	55	60	
Arg Ser Ser Ala Leu Leu Ala Arg Thr Lys Asn Asn Ile Gln Arg Tyr			
65	70	75	80
Phe Gly Thr Asn Ser Val Ile Cys Ser Lys Lys Asp Lys Gln Ser Val			
85	90	95	
Arg Thr Glu Glu Thr Ser Lys Glu Thr Ser Glu Ser Gln Asp Ser Glu			
100	105	110	
Lys Glu Asn Thr Lys Lys Asp Leu Leu Gly Ile Ile Lys Gly Met Lys			
115	120	125	
Val Glu Leu Ser Thr Val Asn Val Arg Thr Thr Lys Pro Pro Lys Arg			
130	135	140	
Arg Pro Leu Lys Ser Leu Glu Ala Thr Leu Gly Arg Leu Arg Arg Ala			
145	150	155	160
Thr Glu Tyr Ala Pro Lys Lys Arg Ile Glu Pro Leu Ser Pro Glu Leu			
165	170	175	
Val Ala Ala Ala Ser Ala Val Ala Asp Ser Leu Pro Phe Asp Lys Gln			
180	185	190	
Thr Thr Lys Ser Glu Leu Leu Ser Gln Leu Gln Gln His Glu Glu Glu			
195	200	205	
Ser Arg Ala Gln Arg Asp Ala Lys Arg Pro Lys Ile Ser Phe Ser Asn			
210	215	220	
Ile Ile Ser Asp Met Lys Val Ala Arg Ser Ala Thr Ala Arg Val Arg			
225	230	235	240
Ser Arg Pro Glu Leu Arg Ile Gln Phe Asp Glu Gly Tyr Asp Asn Tyr			
245	250	255	
Pro Gly Gln Glu Lys Thr Asp Asp Leu Lys Lys Arg Lys Asn Ile Phe			
260	265	270	
Thr Gly Lys Arg Leu Asn Ile Phe Asp Met Met Ala Val Thr Lys Glu			
275	280	285	
Ala Pro Glu Thr Asp Thr Ser Pro Ser Leu Trp Asp Val Glu Phe Ala			
290	295	300	
Lys Gln Leu Ala Thr Val Asn Glu Gln Pro Leu Gln Asn Gly Phe Glu			
305	310	315	320
Glu Leu Ile Gln Trp Thr Lys Glu Gly Lys Leu Trp Glu Phe Pro Ile			
325	330	335	
Asn Asn Glu Ala Gly Phe Asp Asp Asp Gly Ser Glu Phe His Glu His			
340	345	350	
Ile Phe Leu Glu Lys His Leu Glu Ser Phe Pro Lys Gln Gly Pro Ile			
355	360	365	
Arg His Phe Met Glu Leu Val Thr Cys Gly Leu Ser Lys Asn Pro Tyr			
370	375	380	
Leu Ser Val Lys Gln Lys Val Glu His Ile Glu Trp Phe Arg Asn Tyr			
385	390	395	400
Phe Asn Glu Lys Lys Asp Ile Leu Lys Glu Ser Asn Ile Gln Phe Lys			
405	410	415	
Leu Arg Pro Trp Lys Phe Leu Phe Arg Asn Asn			
420	425	427	

<210> 3579

<211> 427

<212> PRT

<213> Homo sapiens

<400> 3579

Arg Pro Arg Arg Arg Gly Thr His His Phe Ser Cys Val Leu Gly Ser

1	5	10	15
Phe Arg Val Ser Ala Met Phe Pro Arg Val Ser Thr Phe Leu Pro Leu			
20	25	30	
Arg Pro Leu Ser Arg His Pro Leu Ser Ser Gly Ser Pro Glu Thr Ser			
35	40	45	
Ala Ala Ala Ile Met Leu Leu Thr Val Arg His Gly Thr Val Arg Tyr			
50	55	60	
Arg Ser Ser Ala Leu Leu Ala Arg Thr Lys Asn Asn Ile Gln Arg Tyr			
65	70	75	80
Phe Gly Thr Asn Ser Val Ile Cys Ser Lys Lys Asp Lys Gln Ser Val			
85	90	95	
Arg Thr Glu Glu Thr Ser Lys Glu Thr Ser Glu Ser Gln Asp Ser Glu			
100	105	110	
Lys Glu Asn Thr Lys Lys Asp Leu Leu Gly Ile Ile Lys Gly Met Lys			
115	120	125	
Val Glu Leu Ser Thr Val Asn Val Arg Thr Thr Lys Pro Pro Lys Arg			
130	135	140	
Arg Pro Leu Lys Ser Leu Glu Ala Thr Leu Gly Arg Leu Arg Arg Ala			
145	150	155	160
Thr Glu Tyr Ala Pro Lys Lys Arg Ile Glu Pro Leu Ser Pro Glu Leu			
165	170	175	
Val Ala Ala Ala Ser Ala Val Ala Asp Ser Leu Pro Phe Asp Lys Gln			
180	185	190	
Thr Thr Lys Ser Glu Leu Leu Ser Gln Leu Gln Gln His Glu Glu Glu			
195	200	205	
Ser Arg Ala Gln Arg Asp Ala Lys Arg Pro Lys Ile Ser Phe Ser Asn			
210	215	220	
Ile Ile Ser Asp Met Lys Val Ala Arg Ser Ala Thr Ala Arg Val Arg			
225	230	235	240
Ser Arg Pro Glu Leu Arg Ile Gln Phe Asp Glu Gly Tyr Asp Asn Tyr			
245	250	255	
Pro Gly Gln Glu Lys Thr Asp Asp Leu Lys Lys Arg Lys Asn Ile Phe			
260	265	270	
Thr Gly Lys Arg Leu Asn Ile Phe Asp Met Met Ala Val Thr Lys Glu			
275	280	285	
Ala Pro Glu Thr Asp Thr Ser Pro Ser Leu Trp Asp Val Glu Phe Ala			
290	295	300	
Lys Gln Leu Ala Thr Val Asn Glu Gln Pro Leu Gln Asn Gly Phe Glu			
305	310	315	320
Glu Leu Ile Gln Trp Thr Lys Glu Gly Lys Leu Trp Glu Phe Pro Ile			
325	330	335	
Asn Asn Glu Ala Gly Phe Asp Asp Asp Gly Ser Glu Phe His Glu His			
340	345	350	
Ile Phe Leu Glu Lys His Leu Glu Ser Phe Pro Lys Gln Gly Pro Ile			
355	360	365	
Arg His Phe Met Glu Leu Val Thr Cys Gly Leu Ser Lys Asn Pro Tyr			
370	375	380	
Leu Ser Val Lys Gln Lys Val Glu His Ile Glu Trp Phe Arg Asn Tyr			
385	390	395	400
Phe Asn Glu Lys Lys Asp Ile Leu Lys Glu Ser Asn Ile Gln Phe Lys			
405	410	415	
Leu Arg Pro Trp Lys Phe Leu Phe Arg Asn Asn			
420	425	427	

<210> 3580

<211> 684

<212> PRT

<213> Homo sapiens

<400> 3580

Leu Tyr Cys Val Ala Pro Tyr Ser Arg His Leu Leu Gly Arg Met Ser

1	5	10	15
His Leu Pro Met Lys	Leu Leu Arg Lys	Lys Ile Glu Lys Arg	Asn Leu
20	25	30	
Lys Leu Arg Gln Arg	Asn Leu Lys Phe	Gln Gly Ala Ser	Asn Leu Thr
35	40	45	
Leu Ser Glu Thr Gln	Asn Gly Asp Val	Ser Glu Glu Thr Met	Gly Ser
50	55	60	
Arg Lys Val Lys Lys	Ser Lys Gln Lys	Pro Met Asn Val Gly	Leu Ser
65	70	75	80
Glu Thr Gln Asn Gly	Gly Met Ser Gln	Glu Ala Val Gly	Asn Ile Lys
85	90	95	
Val Thr Lys Ser Pro	Gln Lys Ser Thr	Val Leu Thr Asn Gly	Glu Ala
100	105	110	
Ala Met Gln Ser Ser	Asn Ser Glu Ser	Lys Lys Lys Lys	Lys Lys
115	120	125	
Arg Lys Met Val Asn	Asp Ala Glu Pro	Asp Thr Lys Lys	Ala Lys Thr
130	135	140	
Glu Asn Lys Gly Lys	Ser Glu Glu Glu	Ser Ala Glu Thr	Thr Lys Glu
145	150	155	160
Thr Glu Asn Asn Val	Glu Lys Pro Asp	Asn Asp Glu Asp	Glu Ser Glu
165	170	175	
Val Pro Ser Leu Pro	Leu Gly Leu Thr	Gly Ala Phe Glu Asp	Thr Ser
180	185	190	
Phe Ala Ser Leu Cys	Asn Leu Val Asn	Glu Asn Thr Leu	Lys Ala Ile
195	200	205	
Lys Glu Met Gly Phe	Thr Asn Met Thr	Glu Ile Gln His	Lys Ser Ile
210	215	220	
Arg Pro Leu Leu Glu	Gly Arg Asp Leu	Leu Ala Ala Lys	Thr Gly
225	230	235	240
Ser Gly Lys Thr Leu	Ala Phe Leu Ile	Pro Ala Val Glu	Leu Ile Val
245	250	255	
Lys Leu Arg Phe Met	Pro Arg Asn Gly	Thr Gly Val Leu	Ile Leu Ser
260	265	270	
Pro Thr Arg Glu Leu	Ala Met Gln Thr	Phe Gly Val Leu	Lys Glu Leu
275	280	285	
Met Thr His His Val	His Thr Tyr Gly	Leu Ile Met Gly	Gly Ser Asn
290	295	300	
Arg Ser Ala Glu Ala	Gln Lys Leu Gly	Asn Gly Ile Asn	Ile Ile Val
305	310	315	320
Ala Thr Pro Gly Arg	Leu Leu Asp His	Met Gln Asn Thr	Pro Gly Phe
325	330	335	
Met Tyr Lys Asn Leu	Gln Cys Leu Val	Ile Asp Glu Ala	Asp Arg Ile
340	345	350	
Leu Asp Val Gly Phe	Glu Glu Glu Leu	Lys Gln Ile Ile	Lys Leu Leu
355	360	365	
Pro Thr Arg Arg Gln	Thr Met Leu Phe	Ser Ala Thr Gln	Thr Arg Lys
370	375	380	
Val Glu Asp Leu Ala	Arg Ile Ser Leu	Lys Lys Glu Pro	Leu Tyr Val
385	390	395	400
Gly Val Asp Asp Asp	Lys Ala Asn Ala	Thr Val Asp Gly	Leu Glu Gln
405	410	415	
Gly Tyr Val Val Cys	Pro Ser Glu Lys	Arg Phe Leu Leu	Leu Phe Thr
420	425	430	
Phe Leu Lys Lys Asn	Arg Lys Lys Lys	Leu Met Val Phe	Phe Ser Ser
435	440	445	
Cys Met Ser Val Lys	Tyr His Tyr Glu	Leu Leu Asn Tyr	Ile Asp Leu
450	455	460	
Pro Val Leu Ala Ile	His Gly Lys Gln	Lys Gln Asn Lys	Arg Thr Thr
465	470	475	480
Thr Phe Phe Gln Phe	Cys Asn Ala Asp	Ser Gly Thr Leu	Leu Cys Thr
485	490	495	
Asp Val Ala Ala Arg	Gly Leu Asp Ile	Pro Glu Val Asp	Trp Ile Val
500	505	510	
Gln Tyr Asp Pro Pro	Asp Asp Pro Lys	Glu Tyr Ile His	Arg Val Gly

515	520	525
Arg Thr Ala Arg Gly Leu Asn Gly Arg Gly His Ala Leu Leu Ile Leu		
530	535	540
Arg Pro Glu Glu Leu Gly Phe Leu Arg Tyr Leu Lys Gln Ser Lys Val		
545	550	555
Pro Leu Ser Glu Phe Asp Phe Ser Trp Ser Lys Ile Ser Asp Ile Gln		
565	570	575
Ser Gln Leu Glu Lys Leu Ile Glu Lys Asn Tyr Phe Leu His Lys Ser		
580	585	590
Ala Gln Glu Ala Tyr Lys Ser Tyr Ile Arg Ala Tyr Asp Ser His Ser		
595	600	605
Leu Lys Gln Ile Phe Asn Val Asn Asn Leu Asn Leu Pro Gln Val Ala		
610	615	620
Leu Ser Phe Gly Phe Lys Val Pro Pro Phe Val Asp Leu Asn Val Asn		
625	630	635
Ser Asn Glu Gly Lys Gln Lys Lys Arg Gly Gly Gly Gly Phe Gly		
645	650	655
Tyr Gln Lys Thr Lys Lys Val Glu Lys Ser Lys Ile Phe Lys His Ile		
660	665	670
Ser Lys Lys Ser Ser Asp Ser Arg Gln Phe Ser His		
675	680	684

<210> 3581
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 3581
Leu Cys Arg Cys Ile Cys Ile Lys Asn Ile Thr Pro His Cys Leu Trp
1 5 10 15
Asp Lys Val Leu Ser Gln Phe Thr Tyr Ile Leu Asp Asn Leu Ser Asn
20 25 30
Phe Met Ser His His Pro His Ser Leu Arg Asn Ser Cys Leu Ile Arg
35 40 45
Met Asp Leu Leu Tyr Trp Gln Phe Thr Ile Tyr Thr Ile Thr Phe Cys
50 55 60
Phe Ser His Leu Ser Gly Arg Leu Thr Leu Ser Ala Gln His Ile Ser
65 70 75 80
His Arg Pro Cys Leu Ser Tyr Ser Leu Leu Phe Trp Lys Val His
85 90 95
His Leu Phe Leu Glu Gly Phe Pro Cys Ser Pro Arg Leu Asp Glu Met
100 105 110
Ser Phe His Gln Phe Pro Gln His Pro Val His Val Ser Val Val His
115 120 125
Leu Pro Ile Val Tyr Lys Gly Ser Met Thr Gln Val Ser Pro His
130 135 140 143

<210> 3582
 <211> 315
 <212> PRT
 <213> Homo sapiens

<400> 3582
Thr Arg Gly Cys Gly Asn Lys Met Ala Gly Lys Lys Asn Val Leu Ser
1 5 10 15
Ser Leu Ala Val Tyr Ala Glu Asp Ser Glu Pro Glu Ser Asp Gly Glu
20 25 30
Ala Gly Ile Glu Ala Val Gly Ser Ala Ala Glu Glu Lys Gly Gly Leu

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      35              40              45
Val Ser Asp Ala Tyr Gly Glu Asp Asp Phe Ser Arg Leu Gly Gly Asp
  50              55              60
Glu Asp Gly Tyr Glu Glu Glu Asp Glu Asn Ser Arg Gln Ser Glu
  65              70              75              80
Asp Asp Asp Ser Glu Thr Glu Lys Pro Glu Ala Asp Asp Pro Lys Asp
      85              90              95
Asn Thr Glu Ala Glu Lys Arg Asp Pro Gln Glu Leu Val Ala Ser Phe
      100              105              110
Ser Glu Arg Val Arg Asn Met Ser Pro Asp Glu Ile Lys Ile Pro Pro
      115              120              125
Glu Pro Pro Gly Arg Cys Ser Asn His Leu Gln Asp Lys Ile Gln Lys
      130              135              140
Leu Tyr Glu Arg Lys Ile Lys Glu Gly Met Asp Met Asn Tyr Ile Ile
      145              150              155              160
Gln Arg Lys Lys Glu Phe Arg Asn Pro Ser Ile Tyr Glu Lys Leu Ile
      165              170              175
Gln Phe Cys Ala Ile Asp Glu Leu Gly Thr Asn Tyr Pro Lys Asp Met
      180              185              190
Phe Asp Pro His Gly Trp Ser Glu Asp Ser Tyr Tyr Glu Ala Leu Ala
      195              200              205
Lys Ala Gln Lys Ile Glu Met Asp Lys Leu Glu Lys Ala Lys Lys Glu
      210              215              220
Arg Thr Lys Ile Glu Phe Val Thr Gly Thr Lys Lys Gly Thr Thr Thr
      225              230              235              240
Asn Ala Thr Ser Thr Thr Thr Thr Thr Ala Ser Thr Ala Val Ala Asp
      245              250              255
Ala Gln Lys Arg Lys Ser Lys Trp Asp Ser Ala Ile Pro Val Thr Thr
      260              265              270
Ile Ala Gln Pro Thr Ile Leu Thr Thr Thr Ala Thr Leu Pro Ala Val
      275              280              285
Val Thr Val Thr Thr Ser Ala Ser Gly Ser Lys Thr Thr Val Ile Ser
      290              295              300
Ala Val Gly Thr Ile Val Lys Lys Ala Lys Gln
      305              310              315

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<210> 3583

<211> 315

<212> PRT

<213> Homo sapiens

<400> 3583

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Thr Arg Gly Cys Gly Asn Lys Met Ala Gly Lys Lys Asn Val Leu Ser
  1              5              10              15
Ser Leu Ala Val Tyr Ala Glu Asp Ser Glu Pro Glu Ser Asp Gly Glu
      20              25              30
Ala Gly Ile Glu Ala Val Gly Ser Ala Ala Glu Glu Lys Gly Gly Leu
      35              40              45
Val Ser Asp Ala Tyr Gly Glu Asp Asp Phe Ser Arg Leu Gly Gly Asp
      50              55              60
Glu Asp Gly Tyr Glu Glu Glu Asp Glu Asn Ser Arg Gln Ser Glu
      65              70              75              80
Asp Asp Asp Ser Glu Thr Glu Lys Pro Glu Ala Asp Asp Pro Lys Asp
      85              90              95
Asn Thr Glu Ala Glu Lys Arg Asp Pro Gln Glu Leu Val Ala Ser Phe
      100              105              110
Ser Glu Arg Val Arg Asn Met Ser Pro Asp Glu Ile Lys Ile Pro Pro
      115              120              125
Glu Pro Pro Gly Arg Cys Ser Asn His Leu Gln Asp Lys Ile Gln Lys
      130              135              140
Leu Tyr Glu Arg Lys Ile Lys Glu Gly Met Asp Met Asn Tyr Ile Ile

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145		150		155		160
Gln Arg Lys Lys Glu Phe Arg Asn Pro Ser Ile Tyr Glu Lys Leu Ile						
	165		170			175
Gln Phe Cys Ala Ile Asp Glu Leu Gly Thr Asn Tyr Pro Lys Asp Met						
	180		185			190
Phe Asp Pro His Gly Trp Ser Glu Asp Ser Tyr Tyr Glu Ala Leu Ala						
	195		200			205
Lys Ala Gln Lys Ile Glu Met Asp Lys Leu Glu Lys Ala Lys Lys Glu						
	210		215			220
Arg Thr Lys Ile Glu Phe Val Thr Gly Thr Lys Lys Gly Thr Thr Thr						
	225		230			235
Asn Ala Thr Ser Thr Thr Thr Thr Thr Ala Ser Thr Ala Val Ala Asp						
	245		250			255
Ala Gln Lys Arg Lys Ser Lys Trp Asp Ser Ala Ile Pro Val Thr Thr						
	260		265			270
Ile Ala Gln Pro Thr Ile Leu Thr Thr Thr Thr Ala Thr Leu Pro Ala Val						
	275		280			285
Val Thr Val Thr Thr Ser Ala Ser Gly Ser Lys Thr Thr Val Ile Ser						
	290		295			300
Ala Val Gly Thr Ile Val Lys Lys Ala Lys Gln						
	305		310			315

<210> 3584
 <211> 379
 <212> PRT
 <213> Homo sapiens

<400> 3584

Pro Gly Ser Thr Ile Ser Ser Arg Ala Asp Arg Leu Gly Ala Pro Val														
1		5					10						15	
Leu Ala His Pro Lys Met Ala Glu Arg Gln Glu Glu Gln Arg Gly Ser														
	20						25						30	
Pro Pro Leu Arg Ala Glu Gly Lys Ala Asp Ala Glu Val Lys Leu Ile														
	35						40						45	
Leu Tyr His Trp Thr His Ser Phe Ser Ser Gln Lys Val Arg Leu Val														
	50						55						60	
Ile Ala Glu Lys Ala Leu Lys Cys Glu Glu His Asp Val Ser Leu Pro														
	65						70						75	
Leu Ser Glu His Asn Glu Pro Trp Phe Met Arg Leu Asn Ser Thr Gly														
							85						90	
Glu Val Pro Val Leu Ile His Gly Glu Asn Ile Ile Cys Glu Ala Thr														
	100						105						110	
Gln Ile Ile Asp Tyr Leu Glu Gln Thr Phe Leu Asp Glu Arg Thr Pro														
	115						120						125	
Arg Leu Met Pro Asp Lys Glu Ser Met Tyr Tyr Pro Arg Val Gln His														
	130						135						140	
Tyr Arg Glu Leu Leu Asp Ser Leu Pro Met Asp Ala Tyr Thr His Gly														
	145						150						155	
Cys Ile Leu His Pro Glu Leu Thr Val Asp Ser Met Ile Pro Ala Tyr														
							165						170	
Ala Thr Thr Arg Ile Arg Ser Gln Ile Gly Asn Thr Glu Ser Glu Leu														
	180						185						190	
Lys Lys Leu Ala Glu Glu Asn Pro Asp Leu Gln Glu Ala Tyr Ile Ala														
	195						200						205	
Lys Gln Lys Arg Leu Lys Ser Lys Leu Leu Asp His Asp Asn Val Lys														
	210						215						220	
Tyr Leu Lys Lys Ile Leu Asp Glu Leu Glu Lys Val Leu Asp Gln Val														
	225						230						235	
Glu Thr Glu Leu Pro Arg Arg Asn Glu Glu Thr Pro Glu Glu Gly Gln														
							245						250	
Gln Pro Trp Leu Cys Gly Glu Ser Phe Thr Leu Ala Asp Val Ser Leu														

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      260      265      270
Ala Val Thr Leu His Arg Leu Lys Phe Leu Gly Phe Ala Arg Arg Asn
      275      280      285
Trp Gly Asn Gly Lys Arg Pro Asn Leu Glu Thr Tyr Tyr Glu Arg Val
      290      295      300
Leu Lys Arg Lys Thr Phe Asn Lys Val Leu Gly His Val Asn Asn Ile
      305      310      315      320
Leu Ile Ser Ala Val Leu Pro Thr Ala Phe Arg Val Ala Lys Lys Arg
      325      330      335
Ala Pro Lys Val Leu Gly Thr Thr Leu Val Val Gly Leu Leu Ala Gly
      340      345      350
Val Gly Tyr Phe Ala Phe Met Leu Phe Arg Lys Arg Leu Gly Ser Met
      355      360      365
Ile Leu Ala Leu Arg Pro Arg Pro Asn Tyr Phe
      370      375      379

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<210> 3585
<211> 592
<212> PRT
<213> Homo sapiens

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      <400> 3585
Arg Arg His Ser Pro Gly Ser Pro Ala Phe Ala Pro Ser Ser Arg Ala
  1      5      10      15
Thr Ala Ile Cys Pro Arg Ala Ala Arg Ala Pro Ala Thr Leu Leu Leu
      20      25      30
Ala Leu Gly Ala Val Leu Trp Pro Ala Ala Gly Ala Trp Glu Leu Thr
      35      40      45
Ile Leu His Thr Asn Asp Val His Ser Arg Leu Glu Gln Thr Ser Glu
      50      55      60
Asp Ser Ser Lys Cys Val Asn Ala Ser Arg Cys Met Gly Gly Val Ala
      65      70      75      80
Arg Leu Phe Thr Lys Val Gln Gln Ile Arg Arg Ala Glu Pro Asn Val
      85      90      95
Leu Leu Leu Asp Ala Gly Asp Gln Tyr Gln Gly Thr Ile Trp Phe Thr
      100      105      110
Val Tyr Lys Gly Ala Glu Val Ala His Phe Met Asn Ala Leu Arg Tyr
      115      120      125
Asp Ala Met Ala Leu Gly Asn His Glu Phe Asp Asn Gly Val Glu Gly
      130      135      140
Leu Ile Glu Pro Leu Leu Lys Glu Ala Lys Phe Pro Ile Leu Ser Ala
      145      150      155      160
Asn Ile Lys Ala Lys Gly Pro Leu Ala Ser Gln Ile Ser Gly Leu Tyr
      165      170      175
Leu Pro Tyr Lys Val Leu Pro Val Gly Asp Glu Val Val Gly Ile Val
      180      185      190
Gly Tyr Thr Ser Lys Glu Thr Pro Phe Leu Ser Asn Pro Gly Thr Asn
      195      200      205
Leu Val Phe Glu Asp Glu Ile Thr Ala Leu Gln Pro Glu Val Asp Lys
      210      215      220
Leu Lys Thr Leu Asn Val Asn Lys Ile Ile Ala Leu Gly His Ser Gly
      225      230      235      240
Phe Glu Met Asp Lys Leu Ile Ala Gln Lys Val Arg Gly Val Asp Val
      245      250      255
Val Val Gly Gly His Ser Asn Thr Phe Leu Tyr Thr Gly Asn Pro Pro
      260      265      270
Ser Lys Glu Val Pro Ala Gly Lys Tyr Pro Phe Ile Val Thr Ser Asp
      275      280      285
Asp Gly Arg Lys Val Pro Val Val Gln Ala Tyr Ala Phe Gly Lys Tyr
      290      295      300
Leu Gly Tyr Leu Lys Ile Glu Phe Asp Glu Arg Gly Asn Val Ile Ser

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305		310		315		320
Ser His Gly Asn Pro Ile Leu Leu Asn Ser Ser Ile Pro Glu Asp Pro						
	325		330		335	
Ser Ile Lys Ala Asp Ile Asn Lys Trp Arg Ile Lys Leu Asp Asn Tyr						
	340		345		350	
Ser Thr Gln Glu Leu Gly Lys Thr Ile Val Tyr Leu Asp Gly Ser Ser						
	355		360		365	
Gln Ser Cys Arg Phe Arg Glu Cys Asn Met Gly Asn Leu Ile Cys Asp						
	370		375		380	
Ala Met Ile Asn Asn Asn Leu Arg His Thr Asp Glu Met Phe Trp Asn						
	385		390		395	
His Val Ser Met Cys Ile Leu Asn Gly Gly Ile Arg Ser Pro Ile						
	405		410		415	
Asp Glu Arg Asn Asn Gly Thr Ile Thr Trp Glu Asn Leu Ala Ala Val						
	420		425		430	
Leu Pro Phe Gly Gly Thr Phe Asp Leu Val Gln Leu Lys Gly Ser Thr						
	435		440		445	
Leu Lys Lys Ala Phe Glu His Ser Val His Arg Tyr Gly Gln Ser Thr						
	450		455		460	
Gly Glu Phe Leu Gln Val Gly Gly Ile His Val Val Tyr Asp Leu Ser						
	465		470		475	
Arg Lys Pro Gly Asp Arg Val Val Lys Leu Asp Val Leu Cys Thr Lys						
	485		490		495	
Cys Arg Val Pro Ser Tyr Asp Pro Leu Lys Met Asp Glu Val Tyr Lys						
	500		505		510	
Val Ile Leu Pro Asn Phe Leu Ala Asn Gly Gly Asp Gly Phe Gln Met						
	515		520		525	
Ile Lys Asp Glu Leu Leu Arg His Asp Ser Gly Asp Gln Asp Ile Asn						
	530		535		540	
Val Val Ser Thr Tyr Ile Ser Lys Met Lys Val Ile Tyr Pro Ala Val						
	545		550		555	
Glu Gly Arg Ile Lys Phe Ser Thr Gly Ser His Cys His Gly Ser Phe						
	565		570		575	
Ser Leu Ile Phe Leu Ser Leu Trp Ala Val Ile Phe Val Leu Tyr Gln						
	580		585		590	
					592	

<210> 3586

<211> 172

<212> PRT

<213> Homo sapiens

<400> 3586

Leu Ser Asn Lys Asp Val Leu Ser Pro Gln Leu Lys Asp Glu Asn Ser														
1		5		10		15								
Lys Leu Arg Arg Lys Leu Asn Glu Val Gln Ser Phe Ser Glu Ala Gln														
	20		25		30									
Thr Glu Met Val Arg Thr Leu Glu Arg Lys Leu Glu Ala Lys Met Ile														
	35		40		45									
Lys Glu Glu Ser Asp Tyr His Asp Leu Glu Ser Val Val Gln Gln Val														
	50		55		60									
Glu Gln Asn Leu Glu Leu Met Thr Lys Arg Ala Val Lys Ala Glu Asn														
	65		70		75									
His Val Val Lys Leu Lys Gln Glu Ile Ser Leu Leu Gln Ala Gln Val														
	85		90		95									
Ser Asn Phe Gln Arg Glu Asn Glu Ala Leu Arg Cys Gly Gln Gly Ala														
	100		105		110									
Ser Leu Thr Val Val Lys Gln Asn Ala Asp Val Ala Leu Gln Asn Leu														
	115		120		125									
Arg Val Val Met Asn Ser Ala Gln Ala Ser Ile Glu Gln Leu Val Ser														

130	135	140
Gly Ala Glu Thr Leu Asn	Leu Val Ala Glu Ile Leu	Lys Ser Ile Asp
145	150	155
Arg Ile Ser Glu Val Lys	Asp Glu Glu Glu Asp	Ser
165	170	172

<210> 3587

<211> 517

<212> PRT

<213> Homo sapiens

<400> 3587

Gly Cys Val Gly Arg Gly Leu Pro Leu Pro Pro Arg His Pro Thr Pro	
1 5 10 15	
Pro Ser Ser Ser Ser Ser Pro Phe Val Leu Leu Ala Phe Leu Leu Leu	
20 25 30	
Val Arg Leu Asp Pro Ala Val Ser Gly Lys Met Ala Ala Pro Arg Pro	
35 40 45	
Pro Pro Ala Arg Leu Ser Gly Val Met Val Pro Ala Pro Ile Gln Asp	
50 55 60	
Leu Glu Ala Leu Arg Ala Leu Thr Ala Leu Phe Lys Glu Gln Arg Asn	
65 70 75 80	
Arg Glu Thr Ala Pro Arg Thr Ile Phe Gln Arg Val Leu Asp Ile Leu	
85 90 95	
Lys Lys Ser Ser His Ala Val Glu Leu Ala Cys Arg Asp Pro Ser Gln	
100 105 110	
Val Glu Asn Leu Ala Ser Ser Leu Gln Leu Ile Thr Glu Cys Phe Arg	
115 120 125	
Cys Leu Arg Asn Ala Cys Ile Glu Cys Ser Val Asn Gln Asn Ser Ile	
130 135 140	
Arg Asn Leu Asp Thr Ile Gly Val Ala Val Asp Leu Ile Leu Leu Phe	
145 150 155 160	
Arg Glu Leu Arg Val Glu Gln Glu Ser Leu Leu Thr Ala Phe Arg Cys	
165 170 175	
Gly Leu Gln Phe Leu Gly Asn Ile Ala Ser Arg Asn Glu Asp Ser Gln	
180 185 190	
Ser Ile Val Trp Val His Ala Phe Pro Glu Leu Phe Leu Ser Cys Leu	
195 200 205	
Asn His Pro Asp Lys Lys Ile Val Ala Tyr Ser Ser Met Ile Leu Phe	
210 215 220	
Thr Ser Leu Asn His Glu Arg Met Lys Glu Leu Glu Glu Asn Leu Asn	
225 230 235 240	
Ile Ala Ile Asp Val Ile Asp Ala Tyr Gln Lys His Pro Glu Ser Glu	
245 250 255	
Trp Pro Phe Leu Ile Ile Thr Asp Leu Phe Leu Lys Ser Pro Glu Leu	
260 265 270	
Val Gln Ala Met Phe Pro Lys Leu Asn Asn Gln Glu Arg Val Thr Leu	
275 280 285	
Leu Asp Leu Met Ile Ala Lys Ile Thr Ser Asp Glu Pro Leu Thr Lys	
290 295 300	
Asp Asp Ile Pro Val Phe Leu Arg His Ala Glu Leu Ile Ala Ser Thr	
305 310 315 320	
Phe Val Asp Gln Cys Lys Thr Val Leu Lys Leu Ala Ser Glu Glu Pro	
325 330 335	
Pro Asp Asp Glu Glu Ala Leu Ala Thr Ile Arg Leu Leu Asp Val Leu	
340 345 350	
Cys Glu Met Thr Val Asn Thr Glu Leu Leu Gly Tyr Leu Gln Val Phe	
355 360 365	
Pro Gly Leu Leu Glu Arg Val Ile Asp Leu Leu Arg Val Ile His Val	
370 375 380	
Ala Gly Lys Glu Thr Thr Asn Ile Phe Ser Asn Cys Gly Cys Val Arg	

385		390		395		400									
Ala	Glu	Gly	Asp	Ile	Ser	Asn	Val	Ala	Asn	Gly	Phe	Lys	Ser	His	Leu
			405						410					415	
Ile	Arg	Leu	Ile	Gly	Asn	Leu	Cys	Tyr	Lys	Asn	Lys	Asp	Asn	Gln	Asp
		420						425						430	
Lys	Val	Asn	Glu	Leu	Asp	Gly	Ile	Pro	Leu	Ile	Leu	Asp	Asn	Cys	Asn
		435					440					445			
Ile	Ser	Asp	Ser	Asn	Pro	Phe	Leu	Thr	Gln	Trp	Val	Ile	Tyr	Ala	Ile
		450					455				460				
Arg	Asn	Leu	Thr	Glu	Asp	Asn	Ser	Gln	Asn	Gln	Asp	Leu	Ile	Ala	Lys
465					470					475				480	
Met	Glu	Glu	Gln	Gly	Leu	Ala	Asp	Ala	Ser	Leu	Leu	Lys	Lys	Val	Gly
			485						490					495	
Phe	Glu	Val	Glu	Lys	Lys	Gly	Glu	Lys	Leu	Ile	Leu	Lys	Ser	Thr	Arg
		500						505						510	
Asp	Thr	Pro	Lys	Pro											
		515		517											

<210> 3588
 <211> 486
 <212> PRT
 <213> Homo sapiens

<400> 3588

Asp	Ser	Pro	Arg	Asn	Arg	Phe	Glu	Ile	Leu	Gly	Arg	Pro	Thr	Arg	Thr
1				5					10					15	
Pro	Thr	Arg	Pro	Gly	Pro	Arg	Pro	Ala	Met	Glu	Asp	Leu	Asp	Ala	Leu
			20					25					30		
Leu	Ser	Asp	Leu	Glu	Thr	Thr	Thr	Ser	His	Met	Pro	Arg	Ser	Gly	Ala
		35				40						45			
Pro	Lys	Glu	Arg	Pro	Ala	Glu	Pro	Leu	Thr	Pro	Pro	Pro	Ser	Tyr	Gly
		50				55					60				
His	Gln	Pro	Gln	Thr	Gly	Ser	Gly	Glu	Ser	Ser	Gly	Ala	Ser	Gly	Asp
65				70					75					80	
Lys	Asp	His	Leu	Tyr	Ser	Thr	Val	Cys	Lys	Pro	Arg	Ser	Pro	Lys	Pro
			85						90					95	
Ala	Ala	Pro	Ala	Ala	Pro	Pro	Phe	Ser	Ser	Ser	Ser	Gly	Val	Leu	Gly
		100						105					110		
Thr	Gly	Leu	Cys	Glu	Leu	Asp	Arg	Leu	Leu	Gln	Glu	Leu	Asn	Ala	Thr
		115				120						125			
Gln	Phe	Asn	Ile	Thr	Asp	Glu	Ile	Met	Ser	Gln	Phe	Pro	Ser	Ser	Lys
		130				135					140				
Val	Ala	Ser	Gly	Glu	Gln	Lys	Glu	Asp	Gln	Ser	Glu	Asp	Lys	Lys	Arg
145					150					155				160	
Pro	Ser	Leu	Pro	Ser	Ser	Pro	Ser	Pro	Gly	Leu	Pro	Lys	Ala	Ser	Ala
			165						170					175	
Thr	Ser	Ala	Thr	Leu	Glu	Leu	Asp	Arg	Leu	Met	Ala	Ser	Leu	Ser	Asp
		180						185					190		
Phe	Arg	Val	Gln	Asn	His	Leu	Pro	Ala	Ser	Gly	Pro	Thr	Gln	Pro	Pro
		195					200					205			
Val	Val	Ser	Ser	Thr	Asn	Glu	Gly	Ser	Pro	Ser	Pro	Pro	Glu	Pro	Thr
		210				215					220				
Gly	Lys	Gly	Ser	Leu	Asp	Thr	Met	Leu	Gly	Leu	Leu	Gln	Ser	Asp	Leu
225					230					235				240	
Ser	Arg	Arg	Gly	Val	Pro	Thr	Gln	Ala	Lys	Gly	Leu	Cys	Gly	Ser	Cys
			245						250					255	
Asn	Lys	Pro	Ile	Ala	Gly	Gln	Val	Val	Thr	Ala	Leu	Gly	Arg	Ala	Trp
		260						265					270		
His	Pro	Glu	His	Phe	Val	Cys	Gly	Gly	Cys	Ser	Thr	Ala	Leu	Gly	Gly
		275					280					285			
Ser	Ser	Phe	Phe	Glu	Lys	Asp	Gly	Ala	Pro	Phe	Cys	Pro	Glu	Cys	Tyr

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      290              295              300
Phe Glu Arg Phe Ser Pro Arg Cys Gly Phe Cys Asn Gln Pro Ile Arg
305              310              315              320
His Lys Met Val Thr Ala Leu Gly Thr His Trp His Pro Glu His Phe
      325              330              335
Cys Cys Val Ser Cys Gly Glu Pro Phe Gly Asp Glu Gly Phe His Glu
      340              345              350
Arg Glu Gly Arg Pro Tyr Cys Arg Arg Asp Phe Leu Gln Leu Phe Ala
      355              360              365
Pro Arg Cys Gln Gly Cys Gln Gly Pro Ile Leu Asp Asn Tyr Ile Ser
      370              375              380
Ala Leu Ser Ala Leu Trp His Pro Asp Cys Phe Val Cys Arg Glu Cys
385              390              395              400
Phe Ala Pro Phe Ser Gly Gly Ser Phe Phe Glu His Glu Gly Arg Pro
      405              410              415
Leu Cys Glu Asn His Phe His Ala Arg Arg Gly Ser Leu Cys Ala Thr
      420              425              430
Cys Gly Leu Pro Val Thr Gly Arg Cys Val Ser Ala Leu Gly Arg Arg
      435              440              445
Phe His Pro Asp His Phe Thr Cys Thr Phe Cys Leu Arg Pro Leu Thr
      450              455              460
Lys Gly Ser Phe Gln Glu Arg Ala Gly Lys Pro Tyr Cys Gln Pro Cys
465              470              475              480
Phe Leu Lys Leu Phe Gly
      485 486

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<210> 3589
<211> 2189
<212> PRT
<213> Homo sapiens

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      <400> 3589
Ser Pro Pro Lys Lys Ser Arg Lys Cys Asn Leu Ser Phe Arg Leu Ile
1      5      10      15
Ser Ala Glu Arg Trp Arg Phe Phe Leu Leu Ile Leu Met Glu Met Pro
      20      25      30
Arg Lys Pro Arg Leu Thr Leu Phe Val Gln Arg Arg Ile Glu Asn Ile
      35      40      45
Ala Thr Glu Arg Glu Phe Asp Pro Glu Glu Phe Tyr Tyr Leu Leu Glu
      50      55      60
Ala Ala Glu Gly His Ala Lys Glu Gly Gln Gly Ile Lys Thr Asp Ile
      65      70      75      80
Pro Arg Tyr Ile Ile Ser Gln Leu Gly Leu Asn Lys Asp Pro Leu Glu
      85      90      95
Glu Met Ala His Leu Gly Asn Tyr Asp Ser Gly Thr Ala Glu Thr Pro
      100      105      110
Glu Thr Asp Glu Ser Val Ser Ser Ser Asn Ala Ser Leu Lys Leu Arg
      115      120      125
Arg Lys Pro Arg Glu Ser Asp Phe Glu Thr Ile Lys Leu Ile Ser Asn
      130      135      140
Gly Ala Tyr Gly Ala Val Tyr Phe Val Arg His Lys Glu Ser Arg Gln
      145      150      155      160
Arg Phe Ala Met Lys Lys Ile Asn Lys Gln Asn Leu Ile Leu Arg Asn
      165      170      175
Gln Ile Gln Gln Ala Phe Val Glu Arg Asp Ile Leu Thr Phe Ala Glu
      180      185      190
Asn Pro Phe Val Val Ser Met Tyr Cys Ser Phe Glu Thr Arg Arg His
      195      200      205
Leu Cys Met Val Met Glu Tyr Val Glu Gly Gly Asp Cys Ala Thr Leu
      210      215      220
Met Lys Asn Met Gly Pro Leu Pro Val Asp Met Ala Arg Met Tyr Phe

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225		230		235		240									
Ala	Glu	Thr	Val	Leu	Ala	Leu	Glu	Tyr	Leu	His	Asn	Tyr	Gly	Ile	Val
				245					250					255	
His	Arg	Asp	Leu	Lys	Pro	Asp	Asn	Leu	Leu	Val	Thr	Ser	Met	Gly	His
			260					265					270		
Ile	Lys	Leu	Thr	Asp	Phe	Gly	Leu	Ser	Lys	Val	Gly	Leu	Met	Ser	Met
		275					280					285			
Thr	Thr	Asn	Leu	Tyr	Glu	Gly	His	Ile	Glu	Lys	Asp	Ala	Arg	Glu	Phe
		290				295					300				
Leu	Asp	Lys	Gln	Val	Cys	Gly	Thr	Pro	Glu	Tyr	Ile	Ala	Pro	Glu	Val
305					310					315				320	
Ile	Leu	Arg	Gln	Gly	Tyr	Gly	Lys	Pro	Val	Asp	Trp	Trp	Ala	Met	Gly
			325					330					335		
Ile	Ile	Leu	Tyr	Glu	Phe	Leu	Val	Gly	Cys	Val	Pro	Phe	Phe	Gly	Asp
		340						345					350		
Thr	Pro	Glu	Glu	Leu	Phe	Gly	Gln	Val	Ile	Ser	Asp	Glu	Ile	Asn	Trp
		355				360						365			
Pro	Glu	Lys	Asp	Glu	Ala	Pro	Pro	Pro	Asp	Ala	Gln	Asp	Leu	Ile	Thr
370					375						380				
Leu	Leu	Leu	Arg	Gln	Asn	Pro	Leu	Glu	Arg	Leu	Gly	Thr	Gly	Gly	Ala
385					390					395				400	
Tyr	Glu	Val	Lys	Gln	His	Arg	Phe	Phe	Arg	Ser	Leu	Asp	Trp	Asn	Ser
			405					410					415		
Leu	Leu	Arg	Gln	Lys	Ala	Glu	Phe	Ile	Pro	Gln	Leu	Glu	Ser	Glu	Asp
		420						425				430			
Asp	Thr	Ser	Tyr	Phe	Asp	Thr	Arg	Ser	Glu	Lys	Tyr	His	His	Met	Glu
		435					440					445			
Thr	Glu	Glu	Glu	Asp	Asp	Thr	Asn	Asp	Glu	Asp	Phe	Asn	Val	Glu	Ile
450						455					460				
Arg	Gln	Phe	Ser	Ser	Cys	Ser	His	Arg	Phe	Ser	Lys	Val	Phe	Ser	Ser
465					470					475				480	
Ile	Asp	Arg	Ile	Thr	Gln	Asn	Ser	Ala	Glu	Glu	Lys	Glu	Asp	Ser	Val
			485					490					495		
Asp	Lys	Thr	Lys	Ser	Thr	Thr	Leu	Pro	Ser	Thr	Glu	Thr	Leu	Ser	Trp
		500						505				510			
Ser	Ser	Glu	Tyr	Ser	Glu	Met	Gln	Gln	Leu	Ser	Thr	Ser	Asn	Ser	Ser
		515					520					525			
Asp	Thr	Glu	Ser	Asn	Arg	His	Lys	Leu	Ser	Ser	Gly	Leu	Leu	Pro	Lys
530					535						540				
Leu	Ala	Ile	Ser	Thr	Glu	Gly	Glu	Gln	Asp	Glu	Ala	Ala	Ser	Cys	Pro
545					550					555				560	
Gly	Asp	Pro	His	Glu	Glu	Pro	Gly	Lys	Pro	Ala	Leu	Pro	Pro	Glu	Glu
			565					570					575		
Cys	Ala	Gln	Glu	Glu	Pro	Glu	Val	Thr	Thr	Pro	Ala	Ser	Thr	Ile	Ser
		580						585					590		
Ser	Ser	Thr	Leu	Ser	Val	Gly	Ser	Phe	Ser	Glu	His	Leu	Asp	Gln	Ile
		595				600					605				
Asn	Gly	Arg	Ser	Glu	Cys	Val	Asp	Ser	Thr	Asp	Asn	Ser	Ser	Lys	Pro
610					615						620				
Ser	Ser	Glu	Pro	Ala	Ser	His	Met	Ala	Arg	Gln	Arg	Leu	Glu	Ser	Thr
625				630						635				640	
Glu	Lys	Lys	Lys	Ile	Ser	Gly	Lys	Val	Thr	Lys	Ser	Leu	Ser	Ala	Ser
			645					650					655		
Ala	Leu	Ser	Leu	Met	Ile	Pro	Gly	Asp	Met	Phe	Ala	Val	Ser	Pro	Leu
		660						665					670		
Gly	Ser	Pro	Met	Ser	Pro	His	Ser	Leu	Ser	Ser	Asp	Pro	Ser	Ser	Ser
		675				680					685				
Arg	Asp	Ser	Ser	Pro	Ser	Arg	Asp	Ser	Ser	Ala	Ala	Ser	Ala	Ser	Pro
690					695						700				
His	Gln	Pro	Ile	Val	Ile	His	Ser	Ser	Gly	Lys	Asn	Tyr	Gly	Phe	Thr
705				710						715				720	
Ile	Arg	Ala	Ile	Arg	Val	Tyr	Val	Gly	Asp	Ser	Asp	Ile	Tyr	Thr	Val
			725					730					735		
His	His	Ile	Val	Trp	Asn	Val	Glu	Glu	Gly	Ser	Pro	Ala	Cys	Gln	Ala

740				745				750							
Gly	Leu	Lys	Ala	Gly	Asp	Leu	Ile	Thr	His	Ile	Asn	Gly	Glu	Pro	Val
755				760				765							
His	Gly	Leu	Val	His	Thr	Glu	Val	Ile	Glu	Leu	Leu	Leu	Lys	Ser	Gly
770				775				780							
Asn	Lys	Val	Ser	Ile	Thr	Thr	Pro	Phe	Glu	Asn	Thr	Ser	Ile	Lys	
785				790				795				800			
Thr	Gly	Pro	Ala	Arg	Arg	Asn	Ser	Tyr	Lys	Ser	Arg	Met	Val	Arg	Arg
805				810				815							
Ser	Lys	Lys	Ser	Lys	Lys	Lys	Glu	Ser	Leu	Glu	Arg	Arg	Arg	Ser	Leu
820				825				830							
Phe	Lys	Lys	Leu	Ala	Lys	Gln	Pro	Ser	Pro	Leu	Leu	His	Thr	Ser	Arg
835				840				845							
Ser	Phe	Ser	Cys	Leu	Asn	Arg	Ser	Leu	Ser	Ser	Gly	Glu	Ser	Leu	Pro
850				855				860							
Gly	Ser	Pro	Thr	His	Ser	Leu	Ser	Pro	Arg	Ser	Pro	Thr	Pro	Ser	Tyr
865				870				875				880			
Arg	Ser	Thr	Pro	Asp	Phe	Pro	Ser	Gly	Thr	Asn	Ser	Ser	Gln	Ser	Ser
885				890				895							
Ser	Pro	Ser	Ser	Ser	Ala	Pro	Asn	Ser	Pro	Ala	Gly	Ser	Gly	His	Ile
900				905				910							
Arg	Pro	Ser	Thr	Leu	His	Gly	Leu	Ala	Pro	Lys	Leu	Gly	Gly	Gln	Arg
915				920				925							
Tyr	Arg	Ser	Gly	Arg	Arg	Lys	Ser	Ala	Gly	Asn	Ile	Pro	Leu	Ser	Pro
930				935				940							
Leu	Ala	Arg	Thr	Pro	Ser	Pro	Thr	Pro	Gln	Pro	Thr	Ser	Pro	Gln	Arg
945				950				955				960			
Ser	Pro	Ser	Pro	Leu	Leu	Gly	His	Ser	Leu	Gly	Asn	Ser	Lys	Ile	Ala
965				970				975							
Gln	Ala	Phe	Pro	Ser	Lys	Met	His	Ser	Pro	Pro	Thr	Ile	Val	Arg	His
980				985				990							
Ile	Val	Arg	Pro	Lys	Ser	Ala	Glu	Pro	Pro	Arg	Ser	Pro	Leu	Leu	Lys
995				1000				1005							
Arg	Val	Gln	Ser	Glu	Glu	Lys	Leu	Ser	Pro	Ser	Tyr	Gly	Ser	Asp	Lys
1010				1015				1020							
Lys	His	Leu	Cys	Ser	Arg	Lys	His	Ser	Leu	Glu	Val	Thr	Gln	Glu	Glu
1025				1030				1035				1040			
Val	Gln	Arg	Glu	Gln	Ser	Gln	Arg	Glu	Ala	Pro	Leu	Gln	Ser	Leu	Asp
1045				1050				1055							
Glu	Asn	Val	Cys	Asp	Val	Pro	Pro	Leu	Ser	Arg	Ala	Arg	Pro	Val	Glu
1060				1065				1070							
Gln	Gly	Cys	Leu	Lys	Arg	Pro	Val	Ser	Arg	Lys	Val	Gly	Arg	Gln	Glu
1075				1080				1085							
Ser	Val	Asp	Asp	Leu	Asp	Arg	Asp	Lys	Leu	Lys	Ala	Lys	Val	Val	Val
1090				1095				1100							
Lys	Lys	Ala	Asp	Gly	Phe	Pro	Glu	Lys	Gln	Glu	Ser	His	Gln	Lys	Phe
1105				1110				1115				1120			
His	Gly	Pro	Gly	Ser	Asp	Leu	Glu	Asn	Phe	Ala	Leu	Phe	Lys	Leu	Glu
1125				1130				1135							
Glu	Arg	Glu	Lys	Lys	Val	Tyr	Pro	Lys	Ala	Val	Glu	Arg	Ser	Ser	Thr
1140				1145				1150							
Phe	Glu	Asn	Lys	Ala	Ser	Met	Gln	Glu	Ala	Pro	Pro	Leu	Gly	Ser	Leu
1155				1160				1165							
Leu	Lys	Asp	Ala	Leu	His	Lys	Gln	Ala	Ser	Val	Arg	Ala	Ser	Glu	Gly
1170				1175				1180							
Ala	Met	Ser	Asp	Gly	Pro	Val	Pro	Ala	Glu	His	Arg	Gln	Gly	Gly	Gly
1185				1190				1195				1200			
Asp	Phe	Arg	Arg	Ala	Pro	Ala	Pro	Gly	Thr	Leu	Gln	Asp	Gly	Leu	Cys
1205				1210				1215							
His	Ser	Leu	Asp	Arg	Gly	Ile	Ser	Gly	Lys	Gly	Glu	Gly	Thr	Glu	Lys
1220				1225				1230							
Ser	Ser	Gln	Ala	Lys	Glu	Leu	Leu	Arg	Cys	Glu	Lys	Leu	Asp	Ser	Lys
1235				1240				1245							
Leu	Ala	Asn	Ile	Asp	Tyr	Leu	Arg	Lys	Lys	Met	Ser	Leu	Glu	Asp	Lys

1250	1255	1260
Glu Asp Asn Leu Cys Pro Val Leu Lys Pro Lys Met Thr Ala Gly Ser		
1265	1270	1275
His Glu Cys Leu Pro Gly Asn Pro Val Arg Pro Thr Gly Gly Gln Gln		1280
	1285	1290
Glu Pro Pro Pro Ala Ser Glu Ser Arg Ala Phe Val Ser Ser Thr His		1295
	1300	1305
Ala Ala Gln Met Ser Ala Val Ser Phe Val Pro Leu Lys Ala Leu Thr		1310
	1315	1320
Gly Arg Val Asp Ser Gly Thr Glu Lys Pro Gly Leu Val Ala Pro Glu		1325
	1330	1335
Ser Pro Val Arg Lys Ser Pro Ser Glu Tyr Lys Leu Glu Gly Arg Ser		1340
1345	1350	1355
Val Ser Cys Leu Glu Pro Ile Glu Gly Thr Leu Asp Ile Ala Leu Leu		1360
	1365	1370
Ser Gly Pro Gln Ala Ser Lys Thr Glu Leu Pro Ser Pro Glu Ser Ala		1375
	1380	1385
Gln Ser Pro Ser Pro Ser Gly Asp Val Arg Ala Ser Val Pro Pro Val		1390
	1395	1400
Leu Pro Ser Ser Ser Gly Lys Lys Asn Asp Thr Thr Ser Ala Arg Glu		1405
	1410	1415
Leu Ser Pro Ser Ser Leu Lys Met Asn Lys Ser Tyr Leu Leu Glu Pro		1420
1425	1430	1435
Trp Phe Leu Pro Pro Ser Arg Gly Leu Gln Asn Ser Pro Ala Val Ser		1440
	1445	1450
Leu Pro Asp Pro Glu Phe Lys Arg Asp Arg Lys Gly Pro His Pro Thr		1455
	1460	1465
Ala Arg Ser Pro Gly Thr Val Met Glu Ser Asn Pro Gln Gln Arg Glu		1470
	1475	1480
Gly Ser Ser Pro Lys His Gln Asp His Thr Thr Asp Pro Lys Leu Leu		1485
	1490	1495
Thr Cys Leu Gly Gln Asn Leu His Ser Pro Asp Leu Ala Arg Pro Arg		1500
1505	1510	1515
Cys Pro Leu Pro Pro Glu Ala Ser Pro Ser Arg Glu Lys Pro Gly Leu		1520
	1525	1530
Arg Glu Ser Ser Glu Arg Gly Pro Pro Thr Ala Arg Ser Glu Arg Ser		1535
	1540	1545
Ala Ala Arg Ala Asp Thr Cys Arg Glu Pro Ser Met Glu Leu Cys Phe		1550
	1555	1560
Pro Glu Thr Ala Lys Thr Ser Asp Asn Ser Lys Asn Leu Leu Ser Val		1565
	1570	1575
Gly Arg Thr His Pro Asp Phe Tyr Thr Gln Thr Gln Ala Met Glu Lys		1580
1585	1590	1595
Ala Trp Ala Pro Gly Gly Lys Thr Asn His Lys Asp Gly Pro Gly Glu		1600
	1605	1610
Ala Arg Pro Pro Pro Arg Asp Asn Ser Ser Leu His Ser Ala Gly Ile		1615
	1620	1625
Pro Cys Glu Lys Glu Leu Gly Lys Val Arg Arg Gly Val Glu Pro Lys		1630
	1635	1640
Pro Glu Ala Leu Leu Ala Arg Arg Ser Leu Gln Pro Pro Gly Ile Glu		1645
	1650	1655
Ser Glu Lys Ser Glu Lys Leu Ser Ser Phe Pro Ser Leu Gln Lys Asp		1660
1665	1670	1675
Gly Ala Lys Glu Pro Glu Arg Lys Glu Gln Pro Leu Gln Arg His Pro		1680
	1685	1690
Ser Ser Ile Pro Pro Pro Pro Leu Thr Ala Lys Asp Leu Ser Ser Pro		1695
	1700	1705
Ala Ala Arg Gln His Cys Ser Ser Pro Ser His Ala Ser Gly Arg Glu		1710
	1715	1720
Pro Gly Ala Lys Pro Ser Thr Ala Glu Pro Ser Ser Ser Pro Gln Asp		1725
	1730	1735
Pro Pro Lys Pro Val Ala His Ser Glu Ser Ser Ser His Lys Pro		1740
1745	1750	1755
Arg Pro Gly Pro Asp Pro Gly Pro Pro Lys Thr Lys His Pro Asp Arg		1760

1765 1770 1775
 Ser Leu Ser Ser Gln Lys Pro Ser Val Gly Ala Thr Lys Gly Lys Glu
 1780 1785 1790
 Pro Ala Thr Gln Ser Leu Gly Gly Ser Ser Arg Glu Gly Lys Gly His
 1795 1800 1805
 Ser Lys Ser Gly Pro Asp Val Phe Pro Ala Thr Pro Gly Ser Gln Asn
 1810 1815 1820
 Lys Ala Ser Asp Gly Ile Gly Gln Gly Glu Gly Gly Pro Ser Val Pro
 1825 1830 1835 1840
 Leu His Thr Asp Arg Ala Pro Leu Asp Ala Lys Pro Gln Pro Thr Ser
 1845 1850 1855
 Gly Gly Arg Pro Leu Glu Val Leu Glu Lys Pro Val His Leu Pro Arg
 1860 1865 1870
 Pro Gly His Pro Gly Pro Ser Glu Pro Ala Asp Gln Lys Leu Ser Ala
 1875 1880 1885
 Val Gly Glu Lys Gln Thr Leu Ser Pro Lys His Pro Lys Pro Ser Thr
 1890 1895 1900
 Val Lys Asp Cys Pro Thr Leu Cys Lys Gln Thr Asp Asn Arg Gln Thr
 1905 1910 1915 1920
 Asp Lys Ser Pro Ser Gln Pro Ala Ala Asn Thr Asp Arg Arg Ala Glu
 1925 1930 1935
 Gly Lys Lys Cys Thr Glu Ala Leu Tyr Ala Pro Ala Glu Gly Asp Lys
 1940 1945 1950
 Leu Glu Ala Gly Leu Ser Phe Val His Ser Glu Asn Arg Leu Lys Gly
 1955 1960 1965
 Ala Glu Arg Pro Ala Ala Gly Val Gly Lys Gly Phe Pro Glu Ala Arg
 1970 1975 1980
 Gly Lys Gly Pro Gly Pro Gln Lys Pro Pro Thr Glu Ala Asp Lys Pro
 1985 1990 1995 2000
 Asn Gly Met Lys Arg Ser Pro Ser Ala Thr Gly Gln Ser Ser Phe Arg
 2005 2010 2015
 Ser Thr Ala Leu Pro Glu Lys Ser Leu Ser Cys Ser Ser Ser Phe Pro
 2020 2025 2030
 Glu Thr Arg Ala Gly Val Arg Glu Ala Ser Ala Ala Ser Ser Asp Thr
 2035 2040 2045
 Ser Ser Ala Lys Ala Ala Gly Gly Met Leu Glu Leu Pro Ala Pro Ser
 2050 2055 2060
 Asn Arg Asp His Arg Lys Ala Gln Pro Ala Gly Glu Gly Arg Thr His
 2065 2070 2075 2080
 Met Thr Lys Ser Asp Ser Leu Pro Ser Phe Arg Val Ser Thr Leu Pro
 2085 2090 2095
 Leu Glu Ser His Pro Asp Pro Asn Thr Met Gly Gly Ala Ser His
 2100 2105 2110
 Arg Asp Arg Ala Leu Ser Val Thr Ala Thr Val Gly Glu Thr Lys Gly
 2115 2120 2125
 Lys Asp Pro Ala Pro Ala Gln Pro Pro Pro Ala Arg Lys Gln Asn Val
 2130 2135 2140
 Gly Arg Asp Val Thr Lys Pro Ser Pro Ala Pro Asn Thr Asp Arg Pro
 2145 2150 2155 2160
 Ile Ser Leu Ser Asn Glu Lys Asp Phe Val Val Arg Gln Arg Arg Gly
 2165 2170 2175
 Lys Glu Ser Leu Arg Ser Ser Pro His Lys Lys Ala Leu
 2180 2185 2189

<210> 3590

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3590

Arg Ala Thr Thr Arg Pro Lys Asn Glu Val Gln Asp Tyr Val Ser Val

1	5	10	15
Glu Tyr Leu Ser Pro His Met Gly Gly Thr Asp Pro Phe Lys Tyr Ser			
	20	25	30
Tyr Pro Pro Leu Val Asp Asp Asp Phe Gln Thr Pro Leu Cys Glu Asn			
	35	40	45
Gly Pro Ile Thr Ser Glu Asp Glu Thr Ser Ser Lys Glu Asp Ile Glu			
	50	55	60
Ser Asp Gly Lys Glu Thr Leu Glu Thr Ile Ser Asn Glu Glu Gln Thr			
	65	70	75
Pro Leu Leu Lys Lys Ile Asn Pro Thr Glu Ser Thr Ser Lys Ala Glu			
	85	90	95
Glu Asn Glu Lys Val Asp Ser Lys Val Lys Ala Phe Lys Lys Pro Leu			
	100	105	110
Ser Val Phe Lys Gly Pro Leu Leu His Ile Ser Pro Ala Glu Glu Leu			
	115	120	125
Tyr Phe Gly Ser Thr Glu Ser Gly Glu Lys Lys Thr Leu Ile Val Leu			
	130	135	140
Thr Asn Val Thr Lys Asn Ile Val Ala Phe Lys Val Arg Thr Thr Ala			
	145	150	155
Pro Glu Lys Tyr Arg Val Lys Pro Ser Asn Ser Ser Cys Asp Pro Gly			
	165	170	175
Ala Ser Val Asp Ile Val Val Ser Pro His Gly Gly Leu Thr Val Ser			
	180	185	190
Ala Gln Asp Arg Phe Leu Ile Met Ala Ala Glu Met Glu Gln Ser Ser			
	195	200	205
Gly Thr Gly Pro Ala Glu Leu Thr Gln Phe Trp Lys Glu Val Pro Arg			
	210	215	220
Asn Lys Val Met Glu His Arg Leu Arg Cys His Thr Val Glu Ser Ser			
	225	230	235
Lys Pro Asn Thr Leu Thr Leu Lys Asp Asn Ala Phe Asn Met Ser Asp			
	245	250	255
Lys Thr Ser Glu Asp Ile Cys Leu Gln Leu Ser Arg Leu Leu Glu Ser			
	260	265	270
Asn Arg Lys Leu Glu Asp Gln Val Gln Arg Cys Ile Trp Phe Gln Gln			
	275	280	285
Leu Leu Leu Ser Leu Thr Met Leu Leu Leu Ala Phe Val Thr Ser Phe			
	290	295	300
Phe Tyr Leu Leu Tyr Ser			
305	310		

<210> 3591

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3591

Gly Gly Ser Trp Gly Pro Leu Cys Pro Val Ser Pro Ala Met Ser Leu			
1	5	10	15
Ser Asp Pro Gly Leu Gly Tyr His Pro Thr Cys Trp Thr Leu Arg Trp			
	20	25	30
Pro Pro Leu Cys Ser Leu His Ala Leu His Val Phe His Cys Leu Phe			
	35	40	45
Ser Ser Arg Leu Gly Thr Pro Val Ser Pro Arg Leu Ala Met Asp Pro			
	50	55	60
Asn Cys Ser Cys Glu Ala Gly Gly Ser Cys Ala Cys Ala Gly Ser Cys			
	65	70	75
Lys Cys Lys Lys Cys Lys Cys Thr Ser Cys Lys Lys Ser Cys Cys Ser			
	85	90	95
Cys Cys Pro Leu			
	100		

<210> 3592
 <211> 242
 <212> PRT
 <213> Homo sapiens

<400> 3592
 Gly Lys Thr Met Met Arg Lys Met Leu Leu Ala Ala Ala Leu Ser Val
 1 5 10 15
 Thr Ala Met Thr Ala His Ala Asp Tyr Gln Cys Ser Val Thr Pro Arg
 20 25 30
 Asp Asp Val Ile Val Ser Pro Gln Thr Val Gln Val Lys Gly Glu Asn
 35 40 45
 Gly Asn Leu Val Ile Thr Pro Asp Gly Asn Val Met Tyr Asn Gly Lys
 50 55 60
 Gln Tyr Ser Leu Asn Ala Ala Gln Arg Glu Gln Ala Lys Asp Tyr Gln
 65 70 75 80
 Ala Glu Leu Arg Ser Thr Leu Pro Trp Ile Asp Glu Gly Ala Lys Ser
 85 90 95
 Arg Val Glu Lys Ala Arg Ile Ala Leu Asp Lys Ile Ile Val Gln Glu
 100 105 110
 Met Gly Glu Ser Ser Lys Met Arg Ser Arg Leu Thr Lys Leu Asp Ala
 115 120 125
 Gln Val Lys Glu Gln Met Asn Arg Ile Ile Glu Thr Arg Ser Asp Gly
 130 135 140
 Leu Thr Phe His Tyr Lys Ala Ile Asp Gln Val Arg Ala Glu Gly Gln
 145 150 155 160
 Gln Leu Val Asn Gln Ala Met Gly Gly Ile Leu Gln Asp Ser Ile Asn
 165 170 175
 Glu Met Gly Ala Lys Ala Val Leu Lys Ser Gly Gly Asn Pro Leu Gln
 180 185 190
 Asn Val Leu Gly Ser Leu Gly Gly Leu Gln Ser Ser Ile Gln Thr Glu
 195 200 205
 Trp Lys Lys Gln Glu Lys Asp Phe Gln Gln Phe Gly Lys Asp Val Cys
 210 215 220
 Ser Arg Val Val Thr Leu Glu Asp Ser Arg Lys Ala Leu Val Gly Asn
 225 230 235 240
 Leu Lys
 242

<210> 3593
 <211> 611
 <212> PRT
 <213> Homo sapiens

<400> 3593
 Leu Ser Phe Glu Lys Val Asp Ile Gln Thr Asp Asn Asp Leu Thr Lys
 1 5 10 15
 Glu Met Tyr Glu Gly Lys Glu Asn Val Ser Phe Glu Leu Gln Arg Asp
 20 25 30
 Phe Ser Gln Glu Thr Asp Phe Ser Glu Ala Ser Leu Leu Glu Lys Gln
 35 40 45
 Gln Glu Val His Ser Ala Gly Asn Ile Lys Lys Glu Lys Ser Asn Thr
 50 55 60
 Ile Asp Gly Thr Val Lys Asp Glu Thr Ser Pro Val Glu Glu Cys Phe
 65 70 75 80
 Phe Ser Gln Ser Ser Asn Ser Tyr Gln Cys His Thr Ile Thr Gly Glu
 85 90 95
 Gln Pro Ser Gly Cys Thr Gly Leu Gly Lys Ser Ile Ser Phe Asp Thr

5361

610 611

<210> 3594
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 3594
 Arg Ala Ala Met Met Asp Thr Ser Arg Val Gln Pro Ile Lys Leu Ala
 1 5 10 15
 Ile Val Ile Lys Val Leu Gly Arg Thr Gly Ser Gln Gly Gln Cys Thr
 20 25 30
 Gln Val Arg Val Glu Phe Met Asp Asp Thr Ser Arg Ser Ile Ile Arg
 35 40 45
 Ser Val Lys Gly Pro Val Arg Glu Gly Asp Val Leu Thr Leu Leu Glu
 50 55 60
 Ser Glu Arg Glu Ala Arg Arg Leu Arg
 65 70 73

<210> 3595
 <211> 301
 <212> PRT
 <213> Homo sapiens

<400> 3595
 Gly Arg Val Gly Thr Lys His Gln Met Ala Asp Asp Ala Gly Ala Ala
 1 5 10 15
 Gly Gly Pro Gly Gly Pro Gly Gly Pro Gly Met Gly Asn Arg Gly Gly
 20 25 30
 Phe Arg Gly Gly Phe Gly Ser Gly Ile Arg Gly Arg Gly Arg Gly Arg
 35 40 45
 Gly Arg Gly Arg Gly Arg Gly Arg Gly Ala Arg Gly Gly Lys Ala Glu
 50 55 60
 Asp Lys Glu Trp Met Pro Val Thr Lys Leu Gly Arg Leu Val Lys Asp
 65 70 75 80
 Met Lys Ile Lys Ser Leu Glu Glu Ile Tyr Leu Phe Ser Leu Pro Ile
 85 90 95
 Lys Glu Ser Glu Ile Ile Asp Phe Phe Leu Gly Ala Ser Leu Lys Asp
 100 105 110
 Glu Val Leu Lys Ile Met Pro Val Gln Lys Gln Thr Arg Ala Gly Gln
 115 120 125
 Arg Thr Arg Phe Lys Ala Phe Val Ala Ile Gly Asp Tyr Asn Gly His
 130 135 140
 Val Gly Leu Gly Val Lys Cys Ser Lys Glu Val Ala Thr Ala Ile Arg
 145 150 155 160
 Gly Ala Ile Ile Leu Ala Lys Leu Ser Ile Val Pro Val Arg Arg Gly
 165 170 175
 Tyr Trp Gly Asn Lys Ile Gly Lys Pro His Thr Val Pro Cys Lys Val
 180 185 190
 Thr Gly Arg Cys Gly Ser Val Leu Val Arg Leu Ile Pro Ala Pro Arg
 195 200 205
 Gly Thr Gly Ile Val Ser Ala Pro Val Pro Lys Lys Leu Leu Met Met
 210 215 220
 Ala Gly Ile Asp Asp Cys Tyr Thr Ser Ala Arg Gly Cys Thr Ala Thr
 225 230 235 240
 Leu Gly Asn Phe Ala Lys Ala Thr Phe Asp Ala Ile Ser Lys Thr Tyr
 245 250 255
 Ser Tyr Leu Thr Pro Asp Leu Trp Lys Glu Thr Val Phe Thr Lys Ser


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<210> 3596
<211> 951
<212> PRT
<213> Homo sapiens
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5363

385		390		395		400
Asn Tyr Lys Asn Val Gly Glu Glu Glu Asp Glu Glu Lys Gly Pro Thr						
	405			410		415
Glu Asp Ala Gln Glu Asp Ala Glu Lys Ala Lys Gly Thr Glu Gly Gly						
	420			425		430
Ser Lys Gly Ile Lys Thr Ser Gly Glu Ser Glu Glu Ile Glu Met Val						
	435			440		445
Ile Met Glu Arg Ser Lys Leu Ser Glu Leu Ala Ala Ser Thr Ser Val						
	450			455		460
Gln Glu Gln Asn Thr Thr Asp Glu Glu Lys Ser Ala Ala Ala Thr Cys						
	465			470		475
Ser Glu Ser Thr Gln Trp Ser Arg Pro Phe Leu Asp Met Val Tyr His						
	485			490		495
Ala Leu Asp Ser Pro Asp Asp Asp Tyr His Ala Leu Phe Val Leu Cys						
	500			505		510
Leu Leu Tyr Ala Met Ser His Asn Lys Gly Met Asp Pro Glu Lys Leu						
	515			520		525
Glu Arg Ile Gln Leu Pro Val Pro Asn Ala Ala Glu Lys Thr Thr Tyr						
	530			535		540
Asn His Pro Leu Ala Glu Arg Leu Ile Arg Ile Met Asn Asn Ala Ala						
	545			550		555
Gln Pro Asp Gly Lys Ile Arg Leu Ala Thr Leu Glu Leu Ser Cys Leu						
	565			570		575
Leu Leu Lys Gln Gln Val Leu Met Ser Ala Gly Cys Ile Met Lys Asp						
	580			585		590
Val His Leu Ala Cys Leu Glu Gly Ala Arg Glu Glu Ser Val His Leu						
	595			600		605
Val Arg His Phe Tyr Lys Gly Glu Asp Ile Phe Leu Asp Met Phe Glu						
	610			615		620
Asp Glu Tyr Arg Ser Met Thr Met Lys Pro Met Asn Val Glu Tyr Leu						
	625			630		635
Met Met Asp Ala Ser Ile Leu Leu Pro Pro Thr Gly Thr Pro Leu Thr						
	645			650		655
Gly Ile Asp Phe Val Lys Arg Leu Pro Cys Gly Asp Val Glu Lys Thr						
	660			665		670
Arg Arg Ala Ile Arg Val Phe Phe Met Leu Arg Ser Leu Ser Leu Gln						
	675			680		685
Leu Arg Gly Glu Pro Glu Thr Gln Leu Pro Leu Thr Arg Glu Glu Asp						
	690			695		700
Leu Ile Lys Thr Asp Asp Val Leu Asp Leu Asn Asn Ser Asp Leu Ile						
	705			710		715
Ala Cys Thr Val Ile Thr Lys Asp Gly Gly Met Val Gln Arg Ser Leu						
	725			730		735
Ala Val Asp Ile Tyr Gln Met Ser Leu Val Glu Pro Asp Val Ser Arg						
	740			745		750
Leu Gly Trp Gly Val Val Lys Phe Ala Gly Leu Leu Gln Asp Met Gln						
	755			760		765
Val Thr Gly Val Glu Asp Asp Ser Arg Ala Leu Asn Ile Thr Ile His						
	770			775		780
Lys Pro Ala Ser Ser Pro His Ser Lys Pro Phe Pro Ile Leu Gln Ala						
	785			790		795
Thr Phe Ile Phe Ser Asp His Ile Arg Cys Ile Ile Ala Lys Gln Arg						
	805			810		815
Leu Ala Lys Gly Arg Ile Gln Ala Arg Arg Met Lys Met Gln Arg Ile						
	820			825		830
Ala Ala Leu Leu Asp Leu Pro Ile Gln Pro Thr Thr Glu Val Leu Gly						
	835			840		845
Phe Gly Leu Gly Ser Ser Thr Ser Thr Gln His Leu Pro Phe Arg Phe						
	850			855		860
Tyr Asp Gln Gly Arg Arg Gly Ser Ser Asp Pro Thr Val Gln Arg Ser						
	865			870		875
Val Phe Ala Ser Val Asp Lys Val Pro Gly Phe Ala Val Ala Gln Cys						
	885			890		895
Ile Asn Glu His Ser Ser Pro Ser Leu Ser Ser Gln Ser Pro Ser						

	900		905		910
Ala	Ser Gly	Ser Pro Ser Gly	Ser Gly Ser Thr Ser	His Cys Asp Ser	
	915		920	925	
Gly	Gly Thr Ser Ser Ser	Ser Thr Pro Ser Thr	Ala Gln Ser Pro Ala		
	930	935	940		
Gly	Ile Gly His Val Thr Gln				
945		950 951			

<210> 3597
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 3597

Gly	Val Arg Arg	Ile Gln His His	Trp Ala Gln Met His	Glu Cys Asn
1		5	10	15
Val	His Thr Tyr	Ala Ser Leu Phe	Cys Leu Phe Leu Leu	His Thr Gly
	20		25	30
Lys	Leu Cys Cys	Leu Asn Ser His	Arg His Phe His Cys	Ile Lys Tyr
	35	40	45	
Ser	Lys			
50				

<210> 3598
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 3598

Phe	Arg Pro Arg	Thr Lys Lys Ala	Thr Ala Met Tyr	Leu Glu His Tyr
1		5	10	15
Leu	Asp Ser Ile	Glu Asn Leu Pro	Cys Glu Leu Gln Arg	Asn Phe Gln
	20		25	30
Leu	Met Arg Glu	Leu Asp Gln Arg	Thr Glu Asp Lys Lys	Ala Glu Ile
	35	40	45	
Asp	Ile Leu Ala	Ala Glu Tyr Ile	Ser Thr Val Lys Thr	Leu Ser Pro
	50	55	60	
Asp	Gln Arg Val	Glu Arg Leu Gln	Lys Ile Gln Asn Ala	Tyr Ser Lys
	65	70	75	80
Cys	Lys Glu Tyr	Ser Asp Asp Lys	Val Gln Leu Ala Met	Gln Thr Tyr
	85	90	95	
Glu	Met Val Asp	Lys His Ile Arg	Arg Leu Asp Ala Asp	Leu Ala Arg
	100	105	110	
Phe	Glu Ala Asp	Leu Lys Asp Lys	Met Glu Gly Ser Asp	Phe Glu Ser
	115	120	125	
Ser	Gly Gly Arg	Gly Leu Lys Lys	Gly Arg Gly Gln Lys	Glu Lys Arg
	130	135	140	
Gly	Ser Arg Gly	Arg Gly Arg Arg	Thr Ser Glu Asp Thr	Pro Lys
	145	150	155	160
Lys	Lys Lys His	Lys Gly Gly		
	165	167		

<210> 3599
 <211> 1301
 <212> PRT
 <213> Homo sapiens

<400> 3599

Lys	Thr	Ile	Thr	Ala	Leu	Ala	Phe	Ser	Pro	Asp	Gly	Lys	Tyr	Leu	Val
1				5					10					15	
Thr	Gly	Glu	Ser	Gly	His	Met	Pro	Ala	Val	Arg	Val	Trp	Asp	Val	Ala
			20					25					30		
Glu	His	Ser	Gln	Val	Ala	Glu	Leu	Gln	Glu	His	Lys	Tyr	Gly	Val	Ala
		35					40					45			
Cys	Val	Ala	Phe	Ser	Pro	Ser	Ala	Lys	Tyr	Ile	Val	Ser	Val	Gly	Tyr
	50					55					60				
Gln	His	Asp	Met	Ile	Val	Asn	Val	Trp	Ala	Trp	Lys	Lys	Asn	Ile	Val
65					70					75				80	
Val	Ala	Ser	Asn	Lys	Val	Ser	Ser	Arg	Val	Thr	Ala	Val	Ser	Phe	Ser
			85					90						95	
Glu	Asp	Cys	Ser	Tyr	Phe	Val	Thr	Ala	Gly	Asn	Arg	His	Ile	Lys	Phe
		100						105					110		
Trp	Tyr	Leu	Asp	Asp	Ser	Lys	Thr	Ser	Lys	Val	Asn	Ala	Thr	Val	Pro
	115					120						125			
Leu	Leu	Gly	Arg	Ser	Gly	Leu	Leu	Gly	Glu	Leu	Arg	Asn	Asn	Leu	Phe
130						135					140				
Thr	Asp	Val	Ala	Cys	Gly	Arg	Gly	Lys	Lys	Ala	Asp	Ser	Thr	Phe	Cys
145					150					155				160	
Ile	Thr	Ser	Ser	Gly	Leu	Leu	Cys	Glu	Phe	Ser	Asp	Arg	Arg	Leu	Leu
				165				170						175	
Asp	Lys	Trp	Val	Glu	Leu	Arg	Val	Tyr	Pro	Glu	Val	Lys	Asp	Ser	Asn
		180						185					190		
Gln	Ala	Cys	Leu	Pro	Pro	Ser	Ser	Phe	Ile	Thr	Cys	Ser	Ser	Asp	Asn
	195					200						205			
Thr	Ile	Arg	Leu	Trp	Asn	Thr	Glu	Ser	Ser	Gly	Val	His	Gly	Ser	Thr
210					215						220				
Leu	His	Arg	Asn	Ile	Leu	Ser	Ser	Asp	Leu	Ile	Lys	Ile	Ile	Tyr	Val
225				230						235				240	
Asp	Gly	Asn	Thr	Gln	Ala	Leu	Leu	Asp	Thr	Glu	Leu	Pro	Gly	Gly	Asp
				245				250						255	
Lys	Ala	Asp	Ala	Ser	Leu	Leu	Asp	Pro	Arg	Val	Gly	Ile	Arg	Ser	Val
		260						265					270		
Cys	Val	Ser	Pro	Asn	Gly	Gln	His	Leu	Ala	Ser	Gly	Asp	Arg	Met	Gly
	275					280						285			
Thr	Leu	Arg	Val	His	Glu	Leu	Gln	Ser	Leu	Ser	Glu	Met	Leu	Lys	Val
290					295						300				
Glu	Ala	His	Asp	Ser	Glu	Ile	Leu	Cys	Leu	Glu	Tyr	Ser	Lys	Pro	Asp
305					310					315				320	
Thr	Gly	Leu	Lys	Leu	Leu	Ala	Ser	Ala	Ser	Arg	Asp	Arg	Leu	Ile	His
				325				330						335	
Val	Leu	Asp	Ala	Gly	Arg	Glu	Tyr	Ser	Leu	Gln	Gln	Thr	Leu	Asp	Glu
			340					345					350		
His	Ser	Ser	Ser	Ile	Thr	Ala	Val	Lys	Phe	Ala	Ala	Ser	Asp	Gly	Gln
	355					360						365			
Val	Arg	Met	Ile	Ser	Cys	Gly	Ala	Asp	Lys	Ser	Ile	Tyr	Phe	Arg	Thr
370						375					380				
Ala	Gln	Lys	Ser	Gly	Asp	Gly	Val	Gln	Phe	Thr	Arg	Thr	His	His	Val
385				390						395				400	
Val	Arg	Lys	Thr	Thr	Leu	Tyr	Asp	Met	Asp	Val	Glu	Pro	Ser	Trp	Lys
				405					410					415	
Tyr	Thr	Ala	Ile	Gly	Cys	Gln	Asp	Arg	Asn	Ile	Arg	Ile	Phe	Asn	Ile
		420						425					430		
Ser	Ser	Gly	Lys	Gln	Lys	Lys	Leu	Phe	Lys	Gly	Ser	Gln	Gly	Glu	Asp
	435						440					445			
Gly	Thr	Leu	Ile	Lys	Val	Gln	Thr	Asp	Pro	Ser	Gly	Ile	Tyr	Ile	Ala
	450					455					460				
Thr	Ser	Cys	Ser	Asp	Lys	Asn	Leu	Ser	Ile	Phe	Asp	Phe	Ser	Ser	Gly
465					470					475				480	
Glu	Cys	Val	Ala	Thr	Met	Phe	Gly	His	Ser	Glu	Ile	Val	Thr	Gly	Met

										485								490								495			
Lys	Phe	Ser	Asn	Asp	Cys	Lys	His	Leu	Ile	Ser	Val	Ser	Gly	Asp	Ser														
										500				505				510											
Cys	Ile	Phe	Val	Trp	Arg	Leu	Ser	Ser	Glu	Met	Thr	Ile	Ser	Met	Arg														
										515				520				525											
Gln	Arg	Leu	Ala	Glu	Leu	Arg	Gln	Arg	Gln	Arg	Gly	Gly	Lys	Gln	Gln														
										530				535				540											
Gly	Pro	Ser	Ser	Pro	Gln	Arg	Ala	Ser	Gly	Pro	Asn	Arg	His	Gln	Ala														
										545				550				555				560							
Pro	Ser	Met	Leu	Ser	Pro	Gly	Pro	Ala	Leu	Ser	Ser	Asp	Ser	Asp	Lys														
										565				570				575											
Glu	Gly	Glu	Asp	Glu	Gly	Thr	Glu	Glu	Glu	Leu	Pro	Ala	Leu	Pro	Val														
										580				585				590											
Leu	Ala	Lys	Ser	Thr	Lys	Lys	Ala	Leu	Ala	Ser	Val	Pro	Ser	Pro	Ala														
										595				600				605											
Leu	Pro	Arg	Ser	Leu	Ser	His	Trp	Glu	Met	Ser	Arg	Ala	Gln	Glu	Ser														
										610				615				620											
Val	Gly	Phe	Leu	Asp	Pro	Ala	Pro	Ala	Ala	Asn	Pro	Gly	Pro	Arg	Arg														
										625				630				635				640							
Arg	Gly	Arg	Trp	Val	Gln	Pro	Gly	Val	Glu	Leu	Ser	Val	Arg	Ser	Met														
										645				650				655											
Leu	Asp	Leu	Arg	Gln	Leu	Glu	Thr	Leu	Ala	Pro	Ser	Leu	Gln	Asp	Pro														
										660				665				670											
Ser	Gln	Asp	Ser	Leu	Ala	Ile	Ile	Pro	Ser	Gly	Pro	Arg	Lys	His	Gly														
										675				680				685											
Gln	Glu	Ala	Leu	Glu	Thr	Ser	Leu	Thr	Ser	Gln	Asn	Glu	Lys	Pro	Pro														
										690				695				700											
Arg	Pro	Gln	Ala	Ser	Gln	Pro	Cys	Ser	Tyr	Pro	His	Ile	Ile	Arg	Leu														
										705				710				715				720							
Leu	Ser	Gln	Glu	Glu	Gly	Val	Phe	Ala	Gln	Asp	Leu	Glu	Pro	Ala	Pro														
										725				730				735											
Ile	Glu	Asp	Gly	Ile	Val	Tyr	Pro	Glu	Pro	Ser	Asp	Asn	Pro	Thr	Met														
										740				745				750											
Asp	Thr	Ser	Glu	Phe	Gln	Val	Gln	Ala	Pro	Ala	Arg	Gly	Thr	Leu	Gly														
										755				760				765											
Arg	Val	Tyr	Pro	Gly	Ser	Arg	Ser	Ser	Glu	Lys	His	Ser	Pro	Asp	Ser														
										770				775				780											
Ala	Cys	Ser	Val	Asp	Tyr	Ser	Ser	Ser	Cys	Leu	Ser	Ser	Pro	Glu	His														
										785				790				795				800							
Pro	Thr	Glu	Asp	Ser	Glu	Ser	Thr	Glu	Pro	Leu	Ser	Val	Asp	Gly	Ile														
										805				810				815											
Ser	Ser	Asp	Leu	Glu	Glu	Pro	Ala	Glu	Gly	Asp	Glu	Glu	Glu	Glu	Glu														
										820				825				830											
Glu	Glu	Gly	Gly	Met	Gly	Pro	Tyr	Gly	Leu	Gln	Glu	Gly	Ser	Pro	Gln														
										835				840				845											
Thr	Pro	Asp	Gln	Glu	Gln	Phe	Leu	Lys	Gln	His	Phe	Glu	Thr	Leu	Ala														
										850				855				860											
Ser	Gly	Ala	Ala	Pro	Gly	Ala	Pro	Val	Gln	Val	Pro	Glu	Arg	Ser	Glu														
										865				870				875				880							
Ser	Arg	Ser	Ile	Ser	Ser	Arg	Phe	Leu	Leu	Gln	Val	Gln	Thr	Arg	Pro														
										885				890				895											
Leu	Arg	Glu	Pro	Ser	Pro	Ser	Ser	Ser	Ser	Leu	Ala	Leu	Met	Ser	Arg														
										900				905				910											
Pro	Ala	Gln	Val	Pro	Gln	Ala	Ser	Gly	Glu	Gln	Pro	Arg	Gly	Asn	Gly														
										915				920				925											
Ala	Asn	Pro	Pro	Gly	Ala	Pro	Pro	Glu	Val	Glu	Pro	Ser	Ser	Gly	Asn														
										930				935				940											
Pro	Ser	Pro	Gln	Gln	Ala	Ala	Ser	Val	Leu	Leu	Pro	Arg	Cys	Arg	Leu														
										945				950				955				960							
Asn	Pro	Asp	Ser	Ser	Trp	Ala	Pro	Lys	Arg	Val	Ala	Thr	Ala	Ser	Pro														
										965				970				975											
Phe	Ser	Gly	Leu	Gln	Lys	Ala	Gln	Ser	Val	His	Ser	Leu	Val	Pro	Gln														
										980				985				990											
Glu	Arg	His	Glu	Ala	Ser	Leu	Gln	Ala	Pro	Ser	Pro	Gly	Ala	Leu	Leu														

995 1000 1005
 Ser Arg Glu Ile Glu Ala Gln Asp Gly Leu Gly Ser Leu Pro Pro Ala
 1010 1015 1020
 Asp Gly Arg Pro Ser Arg Pro His Ser Tyr Gln Asn Pro Thr Thr Ser
 1025 1030 1035 1040
 Ser Met Ala Lys Ile Ser Arg Ser Ile Ser Val Gly Glu Asn Leu Gly
 1045 1050 1055
 Leu Val Ala Glu Pro Gln Ala His Ala Pro Ile Arg Val Ser Pro Leu
 1060 1065 1070
 Ser Lys Leu Ala Leu Pro Ser Arg Ala His Leu Val Leu Asp Ile Pro
 1075 1080 1085
 Lys Pro Leu Pro Asp Arg Pro Thr Leu Ala Ala Phe Ser Pro Val Thr
 1090 1095 1100
 Lys Gly Arg Ala Pro Gly Glu Ala Glu Lys Pro Gly Phe Pro Val Gly
 1105 1110 1115 1120
 Leu Gly Lys Ala His Ser Thr Thr Glu Arg Trp Ala Cys Leu Gly Glu
 1125 1130 1135
 Gly Thr Thr Pro Lys Pro Arg Thr Glu Cys Gln Ala His Pro Gly Pro
 1140 1145 1150
 Ser Ser Pro Cys Ala Gln Gln Leu Pro Val Ser Ser Leu Phe Gln Gly
 1155 1160 1165
 Pro Glu Asn Leu Gln Pro Pro Pro Pro Glu Lys Thr Pro Asn Pro Met
 1170 1175 1180
 Glu Cys Thr Lys Pro Gly Ala Ala Leu Ser Gln Asp Ser Glu Pro Ala
 1185 1190 1195 1200
 Val Ser Leu Glu Gln Cys Glu Gln Leu Val Ala Glu Leu Arg Gly Ser
 1205 1210 1215
 Val Arg Gln Ala Val Arg Leu Tyr His Ser Val Ala Gly Cys Lys Met
 1220 1225 1230
 Pro Ser Ala Glu Gln Ser Arg Ile Ala Gln Leu Leu Arg Asp Thr Phe
 1235 1240 1245
 Ser Ser Val Arg Gln Glu Leu Glu Ala Val Ala Gly Ala Val Leu Ser
 1250 1255 1260
 Ser Pro Gly Ser Ser Pro Gly Ala Val Gly Ala Glu Gln Thr Gln Ala
 1265 1270 1275 1280
 Leu Leu Glu Gln Tyr Ser Glu Leu Leu Leu Arg Ala Val Glu Arg Arg
 1285 1290 1295
 Met Glu Arg Lys Leu
 13001301

<210> 3600
 <211> 257
 <212> PRT
 <213> Homo sapiens

<400> 3600
 Ile Pro Gly Ser Thr Ile Ser Cys Ser Met Ala Leu Cys Glu Ala Ala
 1 5 10 15
 Gly Cys Gly Ser Ala Leu Leu Trp Pro Arg Leu Leu Leu Phe Gly Asp
 20 25 30
 Ser Ile Thr Gln Phe Ser Phe Gln Gln Gly Gly Trp Gly Ala Ser Leu
 35 40 45
 Ala Asp Arg Leu Val Arg Lys Cys Asp Val Leu Asn Arg Gly Phe Ser
 50 55 60
 Gly Tyr Asn Thr Arg Trp Ala Lys Ile Ile Leu Pro Arg Leu Ile Arg
 65 70 75 80
 Lys Gly Asn Ser Leu Asp Ile Pro Val Ala Val Thr Ile Phe Phe Gly
 85 90 95
 Ala Asn Asp Ser Ala Leu Lys Asp Glu Asn Pro Lys Gln His Ile Pro
 100 105 110
 Leu Glu Glu Tyr Ala Ala Asn Leu Lys Ser Met Val Gln Tyr Leu Lys

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      115      120      125
Ser Val Asp Ile Pro Glu Asn Arg Val Ile Leu Ile Thr Pro Thr Pro
  130      135      140
Leu Cys Glu Thr Ala Trp Glu Glu Gln Cys Ile Ile Gln Gly Cys Lys
145      150      155      160
Leu Asn Arg Leu Asn Ser Val Val Gly Glu Tyr Ala Asn Ala Cys Leu
      165      170      175
Gln Val Ala Gln Asp Cys Gly Thr Asp Val Leu Asp Leu Trp Thr Leu
      180      185      190
Met Gln Asp Ser Gln Asp Phe Ser Ser Tyr Leu Ser Asp Gly Leu His
  195      200      205
Leu Ser Pro Lys Gly Asn Glu Phe Leu Phe Ser His Leu Trp Pro Leu
  210      215      220
Ile Glu Lys Lys Val Ser Ser Leu Pro Leu Leu Leu Pro Tyr Trp Arg
225      230      235      240
Asp Val Ala Glu Ala Lys Pro Glu Leu Ser Leu Leu Gly Asp Gly Asp
      245      250      255
His
257

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<210> 3601
<211> 59
<212> PRT
<213> Homo sapiens

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      <400> 3601
Val His Phe Pro Leu Ile Pro Gln Leu Ala Lys Cys Phe Trp Thr Met
  1      5      10      15
Asn Arg Ala Ala Arg Asn Lys Ser Glu Lys Arg Tyr Tyr Ser Glu Phe
      20      25      30
Leu Gln Ile Ala His Leu Phe Asn Tyr Gly Leu Ser Ser Phe Leu Arg
      35      40      45
Glu Phe Ile Ile Phe Leu Ile Lys Leu Leu Gln
      50      55      59

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<210> 3602
<211> 362
<212> PRT
<213> Homo sapiens

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      <400> 3602
Val Pro Lys Pro Ala Ser Gly Lys Arg Arg Leu Glu Phe Arg Pro Gln
  1      5      10      15
Asp Ser Lys Ala Cys Ala Ala Thr Pro His Ser Pro Gly Arg Ile Thr
      20      25      30
Ser Arg Thr Arg Gly Ser Gln Lys Val Arg Ser Val Pro Pro Arg Leu
      35      40      45
Pro Trp Ala Gln Ala Ser Ala Ser Thr Asp Trp Glu Gly Leu Arg Gly
      50      55      60
Val Pro Gly Pro Ala Leu Arg Arg Glu Asn Phe Leu Glu Ala Ala Ala
      65      70      75      80
Ser Gly Arg Ser Gly Arg Thr Pro Thr Gly Gly Val Gly Phe Arg Asp
      85      90      95
Val Gly Gly Pro His Phe Pro Ile Phe Pro Ala Ala His Phe Leu Trp
      100      105      110
Cys Asn Leu His Thr Pro Arg Arg Pro Ala Cys Asn Ala Pro Trp His
      115      120      125
Ser Pro Val Gly Glu Ile Ser Pro Pro Pro Arg Glu Ser Gln Leu Arg

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130	135	140
Arg Asp Pro Glu Val His Phe Glu Ser Pro Ala His Pro Leu Gly Phe		
145	150	155
Arg Leu Leu Pro Gly Arg Gly Leu Pro Ala Asn Ala Val Thr Val Glu		160
	165	170
Thr Ala Ala Met Ala Ala Pro Arg Gln Ile Pro Ser His Ile Val Arg		175
	180	185
Leu Lys Pro Ser Cys Ser Thr Asp Ser Ser Phe Thr Arg Thr Pro Val		190
	195	200
Pro Thr Val Ser Leu Ala Ser Arg Glu Leu Pro Val Ser Ser Trp Gln		205
	210	215
Val Thr Glu Pro Ser Ser Lys Asn Leu Trp Glu Gln Ile Cys Lys Glu		220
225	230	235
Tyr Glu Ala Glu Gln Pro Pro Phe Pro Glu Gly Tyr Lys Val Lys Gln		240
	245	250
Glu Pro Val Ile Thr Val Ala Pro Val Glu Glu Met Leu Phe His Gly		255
	260	265
Phe Ser Ala Glu His Tyr Phe Pro Val Ser His Phe Thr Met Ile Ser		270
	275	280
Arg Thr Pro Cys Pro Gln Asp Lys Ser Glu Thr Ile Asn Pro Lys Thr		285
	290	295
Cys Ser Pro Lys Glu Tyr Leu Glu Thr Phe Ile Phe Pro Val Leu Leu		300
305	310	315
Pro Gly Met Ala Ser Leu Leu His Gln Ala Lys Lys Glu Lys Cys Phe		320
	325	330
Glu Val Val Leu Gln Met Thr Pro Ser Gly Gly Lys Ala Cys Val Trp		335
	340	345
Gly His Leu Pro Ser Ser Ser His Thr Ile		350
	355	360
		362

<210> 3603
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 3603

Asn Ile Ser Asn Lys Ala Glu Val Ser Ser His Pro Ser Val Ile Ser	
1	5
His Ser Met Asp Ser Phe Gly Gln Pro Arg Pro Glu Asp Asn Gln Ser	10
	20
Val Leu Arg Arg Met Gln Lys Lys Tyr Trp Lys Thr Lys Gln Val Phe	25
	30
Ile Lys Ala Thr Gly Lys Lys Glu Asp Glu His Leu Val Ala Ser Asp	35
	40
Ala Glu Leu Asp Ala Lys Leu Glu Val Phe His Ser Val Gln Glu Thr	45
	50
Cys Thr Glu Leu Leu Lys Ile Ile Glu Lys Tyr Gln Leu Arg Leu Asn	55
	60
	65
	70
	75
	80
	85
	90
	95
Gly Met Lys Ser	
	100

<210> 3604
 <211> 779
 <212> PRT
 <213> Homo sapiens

<400> 3604
 Gln Pro Arg Arg Arg Val Phe Pro Ala Ala Gly Arg Gly Pro Gly Arg

1	5	10	15
Lys Cys Ser Gln Trp Gly Arg Gln Ala Ser Val Ser Phe Glu Asp Val			
	20	25	30
Thr Val Asp Phe Ser Lys Glu Glu Trp Gln His Leu Asp Pro Ala Gln			
	35	40	45
Arg Arg Leu Tyr Trp Asp Val Thr Leu Glu Asn Tyr Ser His Leu Leu			
	50	55	60
Ser Val Gly Tyr Gln Ile Pro Lys Ser Glu Ala Ala Phe Lys Leu Glu			
	65	70	75
Gln Gly Glu Gly Pro Trp Met Leu Glu Gly Glu Ala Pro His Gln Ser			
	85	90	95
Cys Ser Gly Glu Ala Ile Gly Lys Met Gln Gln Gln Gly Ile Pro Gly			
	100	105	110
Gly Ile Phe His Cys Glu Arg Phe Asp Gln Pro Ile Gly Glu Asp			
	115	120	125
Ser Leu Cys Ser Ile Leu Glu Glu Leu Trp Gln Asp Asn Asp Gln Leu			
	130	135	140
Glu Gln Arg Gln Glu Asn Gln Asn Asn Leu Leu Ser His Val Lys Val			
	145	150	155
Leu Ile Lys Glu Arg Gly Tyr Glu His Lys Asn Ile Glu Lys Ile Ile			
	165	170	175
His Val Thr Thr Lys Leu Val Pro Ser Ile Lys Arg Leu His Asn Cys			
	180	185	190
Asp Thr Ile Leu Lys His Thr Leu Asn Ser His Asn His Asn Arg Asn			
	195	200	205
Ser Ala Thr Lys Asn Leu Gly Lys Ile Phe Gly Asn Gly Asn Asn Phe			
	210	215	220
Pro His Ser Pro Ser Ser Thr Lys Asn Glu Asn Ala Lys Thr Gly Ala			
	225	230	235
Asn Ser Cys Glu His Asp His Tyr Glu Lys His Leu Ser His Lys Gln			
	245	250	255
Ala Pro Thr His His Gln Lys Ile His Pro Glu Glu Lys Leu Tyr Val			
	260	265	270
Cys Thr Glu Cys Val Met Gly Phe Thr Gln Lys Ser His Leu Phe Glu			
	275	280	285
His Gln Arg Ile His Ala Gly Glu Lys Ser Arg Glu Cys Asp Lys Ser			
	290	295	300
Asn Lys Val Phe Pro Gln Lys Pro Gln Val Asp Val His Pro Ser Val			
	305	310	315
Tyr Thr Gly Glu Lys Pro Tyr Leu Cys Thr Gln Cys Gly Lys Val Phe			
	325	330	335
Thr Leu Lys Ser Asn Leu Ile Thr His Gln Lys Ile His Thr Gly Gln			
	340	345	350
Lys Pro Tyr Lys Cys Ser Glu Cys Gly Lys Ala Phe Phe Gln Arg Ser			
	355	360	365
Asp Leu Phe Arg His Leu Arg Ile His Thr Gly Glu Lys Pro Tyr Glu			
	370	375	380
Cys Ser Glu Cys Gly Lys Gly Phe Ser Gln Asn Ser Asp Leu Ser Ile			
	385	390	395
His Gln Lys Thr His Thr Gly Glu Lys His Tyr Glu Cys Asn Glu Cys			
	405	410	415
Gly Lys Ala Phe Thr Arg Lys Ser Ala Leu Arg Met His Gln Arg Ile			
	420	425	430
His Thr Gly Glu Lys Pro Tyr Val Cys Ala Asp Cys Gly Lys Ala Phe			
	435	440	445
Ile Gln Lys Ser His Phe Asn Thr His Gln Arg Ile His Thr Gly Glu			
	450	455	460
Lys Pro Tyr Glu Cys Ser Asp Cys Gly Lys Ser Phe Thr Lys Lys Ser			
	465	470	475
Gln Leu His Val His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Ile			
	485	490	495
Cys Thr Glu Cys Gly Lys Val Phe Thr His Arg Thr Asn Leu Thr Thr			
	500	505	510
His Gln Lys Thr His Thr Gly Glu Lys Pro Tyr Met Cys Ala Glu Cys			

515	520	525
Gly Lys Ala Phe Thr Asp Gln Ser Asn Leu Ile Lys His Gln Lys Thr		
530	535	540
His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Gly Cys Gly Lys Ala Phe		
545	550	555
Ile Trp Lys Ser Arg Leu Lys Ile His Gln Lys Ser His Ile Gly Glu		
565	570	575
Arg His Tyr Glu Cys Lys Asp Cys Gly Lys Ala Phe Ile Gln Lys Ser		
580	585	590
Thr Leu Ser Val His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Val		
595	600	605
Cys Pro Glu Cys Gly Lys Ala Phe Ile Gln Lys Ser His Phe Ile Ala		
610	615	620
His His Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Ser Asp Cys		
625	630	635
Gly Lys Cys Phe Thr Lys Lys Ser Gln Leu Arg Val His Gln Lys Ile		
645	650	655
His Thr Gly Glu Lys Pro Asn Ile Cys Ala Glu Cys Gly Lys Ala Phe		
660	665	670
Thr Asp Arg Ser Asn Leu Ile Thr His Gln Lys Ile His Thr Arg Glu		
675	680	685
Lys Pro Tyr Glu Cys Gly Asp Cys Gly Lys Thr Phe Thr Trp Lys Ser		
690	695	700
Arg Leu Asn Ile His Gln Lys Ser His Thr Gly Glu Arg His Tyr Glu		
705	710	715
Cys Ser Lys Cys Gly Lys Ala Phe Ile Gln Lys Ala Thr Leu Ser Met		
725	730	735
His Gln Ile Ile His Thr Gly Lys Lys Pro Tyr Ala Cys Thr Glu Cys		
740	745	750
Gln Lys Ala Phe Thr Asp Arg Ser Asn Leu Ile Lys His Gln Lys Met		
755	760	765
His Ser Gly Glu Lys Arg Tyr Lys Ala Ser Asp		
770	775	779

<210> 3605
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 3605
Ser Phe Arg Met Ser Gly Arg Gly Lys Gly Gly Lys Gly Leu Gly Lys
1 5 10 15
Gly Gly Ala Lys Arg His Arg Lys Val Leu Arg Asp Asn Ile Gln Gly
20 25 30
Ile Thr Lys Pro Ala Ile Arg Arg Leu Ala Arg Arg Gly Gly Val Lys
35 40 45
Arg Ile Ser Gly Leu Ile Tyr Glu Glu Thr Arg Gly Val Leu Lys Val
50 55 60
Phe Leu Glu Asn Val Ile Arg Asp Ala Val Thr Tyr Thr Glu His Ala
65 70 75 80
Lys Arg Lys Thr Val Thr Ala Met Asp Val Val Tyr Ala Leu Lys Arg
85 90 95
Gln Gly Arg Thr Leu Tyr Gly Phe Gly Gly
100 105 106

<210> 3606
 <211> 583
 <212> PRT
 <213> Homo sapiens

<400> 3606

Val	Pro	Val	Thr	Ala	Glu	Ala	Lys	Leu	Met	Gly	Phe	Thr	Gln	Gly	Cys
1				5					10					15	
Val	Thr	Phe	Glu	Asp	Val	Ala	Ile	Tyr	Phe	Ser	Gln	Glu	Glu	Trp	Gly
			20					25					30		
Leu	Leu	Asp	Glu	Ala	Gln	Arg	Leu	Leu	Tyr	Arg	Asp	Val	Met	Leu	Glu
		35					40					45			
Asn	Phe	Ala	Leu	Ile	Thr	Ala	Leu	Val	Cys	Trp	His	Gly	Met	Glu	Asp
	50					55					60				
Glu	Glu	Thr	Pro	Glu	Gln	Ser	Val	Ser	Val	Glu	Gly	Val	Pro	Gln	Val
	65				70					75				80	
Arg	Thr	Pro	Glu	Ala	Ser	Pro	Ser	Thr	Gln	Lys	Ile	Gln	Ser	Cys	Asp
				85					90					95	
Met	Cys	Val	Pro	Phe	Leu	Thr	Asp	Ile	Leu	His	Leu	Thr	Asp	Leu	Pro
			100				105						110		
Gly	Gln	Glu	Leu	Tyr	Leu	Thr	Gly	Ala	Cys	Ala	Val	Phe	His	Gln	Asp
	115						120					125			
Gln	Lys	His	His	Ser	Ala	Glu	Lys	Pro	Leu	Glu	Ser	Asp	Met	Asp	Lys
	130					135					140				
Ala	Ser	Phe	Val	Gln	Cys	Cys	Leu	Phe	His	Glu	Ser	Gly	Met	Pro	Phe
145					150					155				160	
Thr	Ser	Ser	Glu	Val	Gly	Lys	Asp	Phe	Leu	Ala	Pro	Leu	Gly	Ile	Leu
				165					170					175	
Gln	Pro	Gln	Ala	Ile	Ala	Asn	Tyr	Glu	Lys	Pro	Asn	Lys	Ile	Ser	Lys
			180					185					190		
Cys	Glu	Glu	Ala	Phe	His	Val	Gly	Ile	Ser	His	Tyr	Lys	Trp	Ser	Gln
	195						200					205			
Cys	Arg	Arg	Glu	Ser	Ser	His	Lys	His	Thr	Phe	Phe	His	Pro	Arg	Val
	210					215					220				
Cys	Thr	Gly	Lys	Arg	Leu	Tyr	Glu	Ser	Ser	Lys	Cys	Gly	Lys	Ala	Cys
225					230					235				240	
Cys	Cys	Glu	Cys	Ser	Leu	Val	Gln	Leu	Gln	Arg	Val	His	Pro	Gly	Glu
				245					250					255	
Arg	Pro	Tyr	Glu	Cys	Ser	Glu	Cys	Gly	Lys	Ser	Phe	Ser	Gln	Thr	Ser
			260					265					270		
His	Leu	Asn	Asp	His	Arg	Arg	Ile	His	Thr	Gly	Glu	Arg	Pro	Tyr	Val
	275						280					285			
Cys	Gly	Gln	Cys	Gly	Lys	Ser	Phe	Ser	Gln	Arg	Ala	Thr	Leu	Ile	Lys
	290					295					300				
His	His	Arg	Val	His	Thr	Gly	Glu	Arg	Pro	Tyr	Glu	Cys	Gly	Glu	Cys
305					310					315				320	
Gly	Lys	Ser	Phe	Ser	Gln	Ser	Ser	Asn	Leu	Ile	Glu	His	Cys	Arg	Ile
				325					330					335	
His	Thr	Gly	Glu	Arg	Pro	Tyr	Glu	Cys	Asp	Glu	Cys	Gly	Lys	Ala	Phe
			340					345					350		
Gly	Ser	Lys	Ser	Thr	Leu	Val	Arg	His	Gln	Arg	Thr	His	Thr	Gly	Glu
		355					360					365			
Lys	Pro	Tyr	Glu	Cys	Gly	Glu	Cys	Gly	Lys	Leu	Phe	Arg	Gln	Ser	Phe
	370					375					380				
Ser	Leu	Val	Val	His	Gln	Arg	Ile	His	Thr	Thr	Ala	Arg	Pro	Tyr	Glu
385					390					395				400	
Cys	Gly	Gln	Cys	Gly	Lys	Ser	Phe	Ser	Leu	Lys	Cys	Gly	Leu	Ile	Gln
				405					410					415	
His	Gln	Leu	Ile	His	Ser	Gly	Ala	Arg	Pro	Phe	Glu	Cys	Asp	Glu	Cys
			420					425					430		
Gly	Lys	Ser	Phe	Ser	Gln	Arg	Thr	Thr	Leu	Asn	Lys	His	His	Lys	Val
			435				440					445			
His	Thr	Ala	Glu	Arg	Pro	Tyr	Val	Cys	Gly	Glu	Cys	Gly	Lys	Ala	Phe
	450					455					460				
Met	Phe	Lys	Ser	Lys	Leu	Val	Arg	His	Gln	Arg	Thr	His	Thr	Gly	Glu
465					470					475				480	
Arg	Pro	Phe	Glu	Cys	Ser	Glu	Cys	Gly	Lys	Phe	Phe	Arg	Gln	Ser	Tyr

				485					490					495	
Thr	Leu	Val	Glu	His	Gln	Lys	Ile	His	Thr	Gly	Leu	Arg	Pro	Tyr	Asp
			500					505					510		
Cys	Gly	Gln	Cys	Gly	Lys	Ser	Phe	Ile	Gln	Lys	Ser	Ser	Leu	Ile	Gln
		515					520					525			
His	Gln	Val	Val	His	Thr	Gly	Glu	Arg	Pro	Tyr	Glu	Cys	Gly	Lys	Cys
		530				535					540				
Gly	Lys	Ser	Phe	Thr	Gln	His	Ser	Gly	Leu	Ile	Leu	His	Arg	Lys	Ser
545					550					555				560	
His	Thr	Val	Glu	Arg	Pro	Arg	Asp	Ser	Ser	Lys	Cys	Gly	Lys	Pro	Tyr
			565					570						575	
Ser	Pro	Arg	Ser	Asn	Ile	Val									
			580			583									

<210> 3607
 <211> 80
 <212> PRT
 <213> Homo sapiens

Ala	Met	Ala	Gly	Pro	Gly	Pro	Gly	Pro	Gly	Asp	Pro	Asp	Glu	Gln	Tyr
1				5					10				15		
Asp	Phe	Leu	Phe	Lys	Leu	Val	Leu	Val	Gly	Asp	Ala	Ser	Val	Gly	Lys
		20						25					30		
Thr	Cys	Val	Gln	Arg	Phe	Lys	Thr	Gly	Ala	Phe	Ser	Glu	Arg	Gln	
		35				40					45				
Gly	Ser	Thr	Ile	Gly	Val	Asp	Phe	Thr	Met	Lys	Thr	Leu	Glu	Ile	Gln
		50				55					60				
Gly	Lys	Arg	Val	Lys	Leu	Gln	Ile	Trp	Asp	Thr	Ala	Gly	Gln	Glu	Arg
65					70					75				80	

<210> 3608
 <211> 55
 <212> PRT
 <213> Homo sapiens

Ala	Ile	Lys	Gly	Tyr	Ile	His	Leu	Ser	Ala	Pro	Arg	Asn	Arg	Tyr	Met
1				5					10				15		
His	Thr	Thr	Ala	Ser	Asn	Gly	Arg	Met	Leu	Phe	Met	Lys	Val	Thr	Met
		20						25					30		
Tyr	Met	Arg	Arg	Gly	Val	Gln	Ile	Met	Gly	Trp	Ser	Val	Arg	Met	Ala
		35					40					45			
Phe	Met	Ala	Cys	Phe	Thr	Gln									
		50				55									

<210> 3609
 <211> 252
 <212> PRT
 <213> Homo sapiens

Val	Trp	Met	Ala	Trp	Gln	Val	Ser	Leu	Leu	Glu	Leu	Glu	Asp	Arg	Leu

1	5	10	15
Gln Cys Pro Ile Cys Leu Glu Val Phe Lys Glu Ser Leu Met Leu Gln			
20	25	30	
Cys Gly His Ser Tyr Cys Lys Gly Cys Leu Val Ser Leu Ser Tyr His			
35	40	45	
Leu Asp Thr Lys Val Arg Cys Pro Met Cys Trp Gln Val Val Asp Gly			
50	55	60	
Ser Ser Ser Leu Pro Asn Val Ser Leu Ala Trp Val Ile Glu Ala Leu			
65	70	75	80
Arg Leu Pro Gly Asp Pro Glu Pro Lys Val Cys Val His His Arg Asn			
85	90	95	
Pro Leu Ser Leu Phe Cys Glu Lys Asp Gln Glu Leu Ile Cys Gly Leu			
100	105	110	
Cys Gly Leu Leu Gly Ser His Gln His His Pro Val Thr Pro Val Ser			
115	120	125	
Thr Val Cys Ser Arg Met Lys Glu Glu Leu Ala Ala Leu Phe Ser Glu			
130	135	140	
Leu Lys Gln Glu Gln Lys Lys Val Asp Glu Leu Ile Ala Lys Leu Val			
145	150	155	160
Lys Asn Arg Thr Arg Ile Val Asn Glu Ser Asp Val Phe Ser Trp Val			
165	170	175	
Ile Arg Arg Glu Phe Gln Glu Leu Arg His Pro Val Asp Glu Glu Lys			
180	185	190	
Ala Arg Cys Leu Glu Gly Ile Gly Gly His Thr Arg Gly Leu Val Ala			
195	200	205	
Ser Leu Asp Met Gln Leu Glu Gln Ala Gln Gly Thr Arg Glu Arg Leu			
210	215	220	
Ala Gln Ala Glu Cys Val Leu Glu Gln Phe Gly Asn Glu Asp His His			
225	230	235	240
Glu Phe Ile Trp Lys Phe His Ser Met Ala Ser Arg			
245	250	252	

<210> 3610

<211> 328

<212> PRT

<213> Homo sapiens

<400> 3610

Asp Pro Arg Val Arg Pro Pro Leu Leu Gln Pro Pro Pro Pro Leu Leu			
1	5	10	15
Pro Arg Leu Val Ile Leu Lys Met Ala Pro Leu Asp Leu Asp Lys Tyr			
20	25	30	
Val Glu Ile Ala Arg Leu Cys Lys Tyr Leu Pro Glu Asn Asp Leu Lys			
35	40	45	
Arg Leu Cys Asp Tyr Val Cys Asp Leu Leu Leu Glu Ser Asn Val			
50	55	60	
Gln Pro Val Ser Thr Pro Val Thr Val Cys Gly Asp Ile His Gly Gln			
65	70	75	80
Phe Tyr Asp Leu Cys Glu Leu Phe Arg Thr Gly Gly Gln Val Pro Asp			
85	90	95	
Thr Asn Tyr Ile Phe Met Gly Asp Phe Val Asp Arg Gly Tyr Tyr Ser			
100	105	110	
Leu Glu Thr Phe Thr Tyr Leu Leu Ala Leu Lys Ala Lys Trp Pro Asp			
115	120	125	
Arg Ile Thr Leu Leu Arg Gly Asn His Glu Ser Arg Gln Ile Thr Gln			
130	135	140	
Val Tyr Gly Phe Tyr Asp Glu Cys Gln Thr Lys Tyr Gly Asn Ala Asn			
145	150	155	160
Ala Trp Arg Tyr Cys Thr Lys Val Phe Asp Met Leu Thr Val Ala Ala			
165	170	175	
Leu Ile Asp Glu Gln Ile Leu Cys Val His Gly Gly Leu Ser Pro Asp			

Ile	Lys	Thr	Leu	Asp	Gln	Ile	Arg	Thr	Ile	Glu	Arg	Asn	Gln	Glu	Ile
	195						200					205			
Pro	His	Lys	Gly	Ala	Phe	Cys	Asp	Leu	Val	Trp	Ser	Asp	Pro	Glu	Asp
	210						215					220			
Val	Asp	Thr	Trp	Ala	Ile	Ser	Pro	Arg	Gly	Ala	Gly	Trp	Leu	Phe	Gly
	225				230					235					240
Ala	Lys	Val	Thr	Asn	Glu	Phe	Val	His	Ile	Asn	Asn	Leu	Lys	Leu	Ile
				245					250					255	
Cys	Arg	Ala	His	Gln	Leu	Val	His	Glu	Gly	Tyr	Lys	Phe	Met	Phe	Asp
		260						265					270		
Glu	Lys	Leu	Val	Thr	Val	Trp	Ser	Ala	Pro	Asn	Tyr	Cys	Tyr	Arg	Cys
		275					280					285			
Gly	Asn	Ile	Ala	Ser	Ile	Met	Val	Phe	Lys	Asp	Val	Asn	Thr	Arg	Glu
	290					295				300					
Pro	Lys	Leu	Phe	Arg	Ala	Val	Pro	Asp	Ser	Glu	Arg	Val	Ile	Pro	Pro
	305				310					315					320
Arg	Thr	Thr	Thr	Pro	Tyr	Phe	Leu								
				325			328								

<210> 3611

<211> 530

<212> PRT

<213> Homo sapiens

<400> 3611

Ala	Glu	Lys	Met	Thr	Ala	Glu	Leu	Arg	Glu	Ala	Met	Ala	Leu	Ala	Pro
1				5					10					15	
Trp	Gly	Pro	Val	Lys	Val	Lys	Lys	Glu	Glu	Glu	Glu	Glu	Glu	Asn	Phe
		20						25					30		
Pro	Gly	Gln	Ala	Ser	Ser	Gln	Gln	Val	His	Ser	Glu	Asn	Ile	Lys	Val
		35					40					45			
Trp	Ala	Pro	Val	Gln	Gly	Leu	Gln	Thr	Gly	Leu	Asp	Gly	Ser	Glu	Glu
	50					55					60				
Glu	Glu	Lys	Gly	Gln	Asn	Ile	Ser	Trp	Asp	Met	Ala	Val	Val	Leu	Lys
	65				70					75					80
Ala	Thr	Gln	Glu	Ala	Pro	Ala	Ala	Ser	Thr	Leu	Gly	Ser	Tyr	Ser	Leu
				85					90					95	
Pro	Gly	Thr	Leu	Ala	Lys	Ser	Glu	Ile	Leu	Glu	Thr	His	Gly	Thr	Met
		100						105					110		
Asn	Phe	Leu	Gly	Ala	Glu	Thr	Lys	Asn	Leu	Gln	Leu	Leu	Val	Pro	Lys
	115						120					125			
Thr	Glu	Ile	Cys	Glu	Glu	Ala	Glu	Lys	Pro	Leu	Ile	Ile	Ser	Glu	Arg
	130					135					140				
Ile	Gln	Lys	Ala	Asp	Pro	Gln	Gly	Pro	Glu	Leu	Gly	Glu	Ala	Cys	Glu
	145				150					155					160
Lys	Gly	Asn	Met	Leu	Lys	Arg	Gln	Arg	Ile	Lys	Arg	Glu	Lys	Lys	Asp
			165					170						175	
Phe	Arg	Gln	Val	Ile	Val	Asn	Asp	Cys	His	Leu	Pro	Glu	Ser	Phe	Lys
		180						185					190		
Glu	Glu	Glu	Asn	Gln	Lys	Cys	Lys	Lys	Ser	Gly	Gly	Lys	Tyr	Ser	Leu
		195					200					205			
Asn	Ser	Gly	Ala	Val	Lys	Asn	Pro	Lys	Thr	Gln	Leu	Gly	Gln	Lys	Pro
	210					215					220				
Phe	Thr	Cys	Ser	Val	Cys	Gly	Lys	Gly	Phe	Ser	Gln	Ser	Ala	Asn	Leu
	225					230				235					240
Val	Val	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Phe	Glu	Cys	His
				245					250					255	
Glu	Cys	Gly	Lys	Ala	Phe	Ile	Gln	Ser	Ala	Asn	Leu	Val	Val	His	Gln
			260					265					270		
Arg	Ile	His	Thr	Gly	Gln	Lys	Pro	Tyr	Val	Cys	Ser	Lys	Cys	Gly	Lys

275	280	285
Ala Phe Thr Gln Ser Ser Asn Leu Thr Val His Gln Lys Ile His Ser		
290	295	300
Leu Glu Lys Thr Phe Lys Cys Asn Glu Cys Glu Lys Ala Phe Ser Tyr		
305	310	315
Ser Ser Gln Leu Ala Arg His Gln Lys Val His Ile Thr Glu Lys Cys		
	325	330
Tyr Glu Cys Asn Glu Cys Gly Lys Thr Phe Thr Arg Ser Ser Asn Leu		
	340	345
Ile Val His Gln Arg Ile His Thr Gly Glu Lys Pro Phe Ala Cys Asn		
	355	360
Asp Cys Gly Lys Ala Phe Thr Gln Ser Ala Asn Leu Ile Val His Gln		
	370	375
Arg Ser His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys		
385	390	395
Ala Phe Ser Cys Phe Ser His Leu Ile Val His Gln Arg Ile His Thr		
	405	410
Ala Glu Lys Pro Tyr Asp Cys Ser Glu Cys Gly Lys Ala Phe Ser Gln		
	420	425
Leu Ser Cys Leu Ile Val His Gln Arg Ile His Ser Gly Asp Leu Pro		
	435	440
Tyr Val Cys Asn Glu Cys Gly Lys Ala Phe Thr Cys Ser Ser Tyr Leu		
	450	455
Leu Ile His Gln Arg Ile His Asn Gly Glu Lys Pro Tyr Thr Cys Asn		
465	470	475
Glu Cys Gly Lys Ala Phe Arg Gln Arg Ser Ser Leu Thr Val His Gln		
	485	490
Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Glu Lys Cys Gly Ala		
	500	505
Ala Phe Ile Ser Asn Ser His Leu Met Arg His His Arg Thr His Leu		
	515	520
Val Glu		525
530		

<210> 3612
 <211> 642
 <212> PRT
 <213> Homo sapiens

<400> 3612
Ser Pro Met Ala Glu Ala Ala Leu Val Asn Thr Pro Gln Ile Pro Met
1 5 10 15
Val Thr Glu Glu Phe Val Lys Pro Ser Gln Gly His Val Thr Phe Glu
20 25 30
Asp Ile Ala Val Tyr Phe Ser Gln Glu Glu Trp Gly Leu Leu Asp Glu
35 40 45
Ala Gln Arg Cys Leu Tyr His Asp Val Met Leu Glu Asn Phe Ser Leu
50 55 60
Met Ala Ser Val Gly Cys Leu His Gly Ile Glu Ala Glu Glu Ala Pro
65 70 75 80
Ser Glu Gln Thr Leu Ser Ala Gln Gly Val Ser Gln Ala Arg Thr Pro
85 90 95
Lys Leu Gly Pro Ser Ile Pro Asn Ala His Ser Cys Glu Met Cys Ile
100 105 110
Leu Val Met Lys Asp Ile Leu Tyr Leu Ser Glu His Gln Gly Thr Leu
115 120 125
Pro Trp Gln Lys Pro Tyr Thr Ser Val Ala Ser Gly Lys Trp Phe Ser
130 135 140
Phe Gly Ser Asn Leu Gln His Gln Asn Gln Asp Ser Gly Glu Lys
145 150 155 160
His Ile Arg Lys Glu Glu Ser Ser Ala Leu Leu Leu Asn Ser Cys Lys

				165					170					175	
Ile	Pro	Leu	Ser	Asp	Asn	Leu	Phe	Pro	Cys	Lys	Asp	Val	Glu	Lys	Asp
			180						185					190	
Phe	Pro	Thr	Ile	Leu	Gly	Leu	Leu	Gln	His	Gln	Thr	Thr	His	Ser	Arg
		195					200					205			
Gln	Glu	Tyr	Ala	His	Arg	Ser	Arg	Glu	Thr	Phe	Gln	Gln	Arg	Arg	Tyr
	210						215				220				
Lys	Cys	Glu	Gln	Val	Phe	Asn	Glu	Lys	Val	His	Val	Thr	Glu	His	Gln
225					230					235				240	
Arg	Val	His	Thr	Gly	Glu	Lys	Ala	Tyr	Lys	Arg	Arg	Glu	Tyr	Gly	Lys
				245					250					255	
Ser	Leu	Asn	Ser	Lys	Tyr	Leu	Phe	Val	Glu	His	Gln	Arg	Thr	His	Asn
			260					265					270		
Ala	Glu	Lys	Pro	Tyr	Val	Cys	Asn	Ile	Cys	Gly	Lys	Ser	Phe	Leu	His
	275						280					285			
Lys	Gln	Thr	Leu	Val	Gly	His	Gln	Gln	Arg	Ile	His	Thr	Arg	Glu	Arg
	290					295					300				
Ser	Tyr	Val	Cys	Ile	Glu	Cys	Gly	Lys	Ser	Leu	Ser	Ser	Lys	Tyr	Ser
305					310					315				320	
Leu	Val	Glu	His	Gln	Arg	Thr	His	Asn	Gly	Glu	Lys	Pro	Tyr	Val	Cys
				325					330					335	
Asn	Val	Cys	Gly	Lys	Ser	Phe	Arg	His	Lys	Gln	Thr	Phe	Val	Gly	His
			340					345					350		
Gln	Gln	Arg	Ile	His	Thr	Gly	Glu	Arg	Pro	Tyr	Val	Cys	Met	Glu	Cys
		355					360					365			
Gly	Lys	Ser	Phe	Ile	His	Ser	Tyr	Asp	Arg	Ile	Arg	His	Gln	Arg	Val
	370					375					380				
His	Thr	Gly	Glu	Gly	Ala	Tyr	Gln	Cys	Ser	Glu	Cys	Gly	Lys	Ser	Phe
385					390					395				400	
Ile	Tyr	Lys	Gln	Ser	Leu	Leu	Asp	His	His	Arg	Ile	His	Thr	Gly	Glu
				405					410					415	
Arg	Pro	Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe	Ile	His	Lys	Lys
			420					425					430		
Arg	Leu	Leu	Glu	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Val
	435						440					445			
Cys	Ile	Ile	Cys	Gly	Lys	Ser	Phe	Ile	Arg	Ser	Ser	Asp	Tyr	Met	Arg
	450					455					460				
His	Gln	Arg	Ile	His	Thr	Gly	Glu	Arg	Ala	Tyr	Glu	Cys	Ser	Asp	Cys
465					470					475				480	
Gly	Lys	Ala	Phe	Ile	Ser	Lys	Gln	Thr	Leu	Leu	Lys	His	His	Lys	Ile
				485					490					495	
His	Thr	Arg	Glu	Arg	Pro	Tyr	Glu	Cys	Ser	Glu	Cys	Gly	Lys	Gly	Phe
			500					505					510		
Tyr	Leu	Glu	Val	Lys	Leu	Leu	Gln	His	Gln	Arg	Ile	His	Thr	Arg	Glu
	515						520					525			
Gln	Leu	Cys	Glu	Cys	Asn	Glu	Cys	Gly	Lys	Val	Phe	Ser	His	Gln	Lys
	530					535					540				
Arg	Leu	Leu	Glu	His	Gln	Lys	Val	His	Thr	Gly	Glu	Lys	Pro	Cys	Glu
545					550					555				560	
Cys	Ser	Glu	Cys	Gly	Lys	Cys	Phe	Arg	His	Arg	Thr	Ser	Leu	Ile	Gln
				565					570					575	
His	Gln	Lys	Val	His	Ser	Gly	Glu	Arg	Pro	Tyr	Asn	Cys	Thr	Ala	Cys
			580					585					590		
Glu	Lys	Ala	Phe	Ile	Tyr	Lys	Asn	Lys	Leu	Val	Glu	His	Gln	Arg	Ile
	595						600					605			
His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Gly	Lys	Cys	Gly	Lys	Ala	Phe
	610					615					620				
Asn	Lys	Arg	Tyr	Ser	Leu	Val	Arg	His	Gln	Lys	Val	His	Ile	Thr	Glu
625					630					635				640	
Glu	Pro														
	642														

<210> 3613
 <211> 843
 <212> PRT
 <213> Homo sapiens

<400> 3613
 Asn Gln Ser His Pro Asp Ser Glu Thr Val Thr Val Glu Gly Gly Arg
 1 5 10 15
 Arg Lys Met Lys Ser Asn Gln Glu Arg Ser Asn Glu Cys Leu Pro Pro
 20 25 30
 Lys Lys Arg Glu Ile Pro Ala Thr Ser Arg Ser Ser Glu Glu Lys Ala
 35 40 45
 Pro Thr Leu Pro Ser Asp Asn His Arg Val Glu Gly Thr Ala Trp Leu
 50 55 60
 Pro Gly Asn Pro Gly Gly Arg Gly His Gly Gly Gly Arg His Gly Pro
 65 70 75 80
 Ala Gly Thr Ser Val Glu Leu Gly Leu Gln Gln Gly Ile Gly Leu His
 85 90 95
 Lys Ala Leu Ser Thr Gly Leu Asp Tyr Ser Pro Pro Ser Ala Pro Arg
 100 105 110
 Ser Val Pro Val Ala Thr Thr Leu Pro Ala Ala Tyr Ala Thr Pro Gln
 115 120 125
 Pro Gly Thr Pro Val Ser Pro Val Gln Tyr Ala His Leu Pro His Thr
 130 135 140
 Phe Gln Phe Ile Gly Ser Ser Gln Tyr Ser Gly Thr Tyr Ala Ser Phe
 145 150 155 160
 Ile Pro Ser Gln Leu Ile Pro Pro Thr Ala Asn Pro Val Thr Ser Ala
 165 170 175
 Val Ala Ser Ala Ala Gly Ala Thr Thr Pro Ser Gln Arg Ser Gln Leu
 180 185 190
 Glu Ala Tyr Ser Thr Leu Leu Ala Asn Met Gly Ser Leu Ser Gln Thr
 195 200 205
 Pro Gly His Lys Ala Glu Gln Gln Gln Gln Gln Gln Gln Gln Gln
 210 215 220
 Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln His Gln
 225 230 235 240
 Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln His Leu Ser
 245 250 255
 Arg Ala Pro Gly Leu Ile Thr Pro Gly Ser Pro Pro Pro Ala Gln Gln
 260 265 270
 Asn Gln Tyr Val His Ile Ser Ser Pro Gln Asn Thr Gly Arg Thr
 275 280 285
 Ala Ser Pro Pro Ala Ile Pro Val His Leu His Pro His Gln Thr Met
 290 295 300
 Ile Pro His Thr Leu Thr Leu Gly Pro Pro Ser Gln Val Val Met Gln
 305 310 315 320
 Tyr Ala Asp Ser Gly Ser His Phe Val Pro Arg Glu Ala Thr Lys Lys
 325 330 335
 Ala Glu Ser Ser Arg Leu Gln Gln Ala Ile Gln Ala Lys Glu Val Leu
 340 345 350
 Asn Gly Glu Met Glu Lys Ser Arg Arg Tyr Gly Ala Pro Ser Ser Ala
 355 360 365
 Asp Leu Gly Leu Gly Lys Ala Gly Gly Lys Ser Val Pro His Pro Tyr
 370 375 380
 Glu Ser Arg His Val Val His Pro Ser Pro Ser Asp Tyr Ser Ser
 385 390 395 400
 Arg Asp Pro Ser Gly Val Arg Ala Ser Val Met Val Leu Pro Asn Ser
 405 410 415
 Asn Thr Pro Ala Ala Asp Leu Glu Val Gln Gln Ala Thr His Arg Glu
 420 425 430
 Ala Ser Pro Ser Thr Leu Asn Asp Lys Ser Gly Leu His Leu Gly Lys
 435 440 445
 Pro Gly His Arg Ser Tyr Ala Leu Ser Pro His Thr Val Ile Gln Thr

450 455 460
 Thr His Ser Ala Ser Glu Pro Leu Pro Val Gly Leu Pro Ala Thr Ala
 465 470 475 480
 Phe Tyr Ala Gly Thr Gln Pro Pro Val Ile Gly Tyr Leu Ser Gly Gln
 485 490 495
 Gln Gln Ala Ile Thr Tyr Ala Gly Ser Leu Pro Gln His Leu Val Ile
 500 505 510
 Pro Gly Thr Gln Pro Leu Leu Ile Pro Val Gly Ser Thr Asp Met Glu
 515 520 525
 Ala Ser Gly Ala Ala Pro Ala Ile Val Thr Ser Ser Pro Gln Phe Ala
 530 535 540
 Ala Val Pro His Thr Phe Val Thr Thr Ala Leu Pro Lys Ser Glu Asn
 545 550 555 560
 Phe Asn Pro Glu Ala Leu Val Thr Gln Ala Ala Tyr Pro Ala Met Val
 565 570 575
 Gln Ala Gln Ile His Leu Pro Val Val Gln Ser Val Ala Ser Pro Ala
 580 585 590
 Ala Ala Pro Thr Leu Pro Pro Tyr Phe Met Lys Gly Ser Ile Ile
 595 600 605
 Gln Leu Ala Asn Gly Glu Leu Lys Lys Val Glu Asp Leu Lys Thr Glu
 610 615 620
 Asp Phe Ile Gln Ser Ala Glu Ile Ser Asn Asp Leu Lys Ile Asp Ser
 625 630 635 640
 Ser Thr Val Glu Arg Ile Glu Asp Ser His Ser Pro Gly Val Ala Val
 645 650 655
 Ile Gln Phe Ala Val Gly Glu His Arg Ala Gln Val Ser Val Glu Val
 660 665 670
 Leu Val Glu Tyr Pro Phe Phe Val Phe Gly Gln Gly Trp Ser Ser Cys
 675 680 685
 Cys Pro Glu Arg Thr Ser Gln Leu Phe Asp Leu Pro Cys Ser Lys Leu
 690 695 700
 Ser Val Gly Asp Val Cys Ile Ser Leu Thr Leu Lys Asn Leu Lys Asn
 705 710 715 720
 Gly Ser Val Lys Lys Gly Gln Pro Val Asp Pro Ala Ser Val Leu Leu
 725 730 735
 Lys His Ser Lys Ala Asp Gly Leu Ala Gly Ser Arg His Arg Tyr Ala
 740 745 750
 Glu Gln Glu Asn Gly Ile Asn Gln Gly Ser Ala Gln Met Leu Ser Glu
 755 760 765
 Asn Gly Glu Leu Lys Phe Pro Glu Lys Met Gly Leu Ser Ala Ala Pro
 770 775 780
 Phe Leu Thr Lys Ile Glu Pro Ser Lys Pro Ala Ala Thr Arg Lys Arg
 785 790 795 800
 Arg Trp Ser Ala Pro Glu Ser Arg Lys Leu Glu Lys Ser Glu Asp Glu
 805 810 815
 Pro Pro Leu Thr Leu Pro Lys Pro Ser Leu Ile Pro Gln Glu Val Lys
 820 825 830
 Ile Cys Ile Glu Gly Arg Ser Asn Val Gly Lys
 835 840 843

<210> 3614
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 3614
 Phe Phe Glu Ser Arg Leu Arg Cys Lys Cys Cys Glu Pro Arg Gly Ser
 1 5 10 15
 Trp Ala Arg Phe Gly Cys Trp Arg Leu Gln Pro Glu Phe Lys Pro Lys
 20 25 30
 Gln Leu Glu Gly

35 36

<210> 3615
 <211> 533
 <212> PRT
 <213> Homo sapiens

<400> 3615
 Asp Ala Trp Ala Leu Thr Asn Gln Phe Ser Asp Ser Lys Gln His Ile
 1 5 10 15
 Glu Val Leu Lys Glu Ser Leu Thr Ala Lys Glu Gln Arg Ala Ala Ile
 20 25 30
 Leu Gln Thr Glu Val Asp Ala Leu Arg Leu Arg Leu Glu Glu Lys Glu
 35 40 45
 Thr Met Leu Asn Lys Lys Thr Lys Gln Ile Gln Asp Met Ala Glu Glu
 50 55 60
 Lys Gly Thr Gln Ala Gly Glu Ile His Asp Leu Lys Asp Met Leu Asp
 65 70 75 80
 Val Lys Glu Arg Lys Val Asn Val Leu Gln Lys Lys Ile Glu Asn Leu
 85 90 95
 Gln Glu Gln Leu Arg Asp Lys Glu Lys Gln Met Ser Ser Leu Lys Glu
 100 105 110
 Arg Val Lys Ser Leu Gln Ala Asp Thr Thr Asn Thr Asp Thr Ala Leu
 115 120 125
 Thr Thr Leu Glu Glu Ala Leu Ala Glu Lys Glu Arg Thr Ile Glu Arg
 130 135 140
 Leu Lys Glu Gln Arg Asp Arg Asp Glu Arg Glu Lys Gln Glu Glu Ile
 145 150 155 160
 Asp Asn Tyr Lys Lys Asp Leu Lys Asp Leu Lys Glu Lys Val Ser Leu
 165 170 175
 Leu Gln Gly Asp Leu Ser Glu Lys Glu Ala Ser Leu Leu Asp Leu Lys
 180 185 190
 Glu His Ala Ser Ser Leu Ala Ser Ser Gly Leu Lys Lys Asp Ser Arg
 195 200 205
 Leu Lys Thr Leu Glu Ile Ala Leu Glu Gln Lys Lys Glu Glu Cys Leu
 210 215 220
 Lys Met Glu Ser Gln Leu Lys Lys Ala His Glu Ala Ala Leu Glu Ala
 225 230 235 240
 Arg Ala Ser Pro Glu Met Ser Asp Arg Ile Gln His Leu Glu Arg Glu
 245 250 255
 Ile Thr Arg Tyr Lys Asp Glu Ser Ser Lys Ala Gln Ala Glu Val Asp
 260 265 270
 Arg Leu Leu Glu Ile Leu Lys Glu Val Glu Asn Glu Lys Asn Asp Lys
 275 280 285
 Asp Lys Lys Ile Ala Glu Leu Glu Ser Leu Thr Ser Arg Gln Val Lys
 290 295 300
 Asp Gln Asn Lys Lys Val Ala Asn Leu Lys His Lys Glu Gln Val Glu
 305 310 315 320
 Lys Lys Lys Ser Ala Gln Met Leu Glu Glu Ala Arg Arg Arg Glu Asp
 325 330 335
 Asn Leu Asn Asp Ser Ser Gln Gln Leu Gln Asp Ser Leu Arg Lys Lys
 340 345 350
 Asp Asp Arg Ile Glu Glu Leu Glu Glu Ala Leu Arg Glu Ser Val Gln
 355 360 365
 Ile Thr Ala Glu Arg Glu Met Val Leu Ala Gln Glu Glu Ser Ala Arg
 370 375 380
 Thr Asn Ala Glu Lys Gln Val Glu Glu Leu Leu Met Ala Met Glu Lys
 385 390 395 400
 Val Lys Gln Glu Leu Glu Ser Met Lys Ala Lys Leu Ser Ser Thr Gln
 405 410 415
 Gln Ser Leu Ala Glu Lys Glu Thr His Leu Thr Asn Leu Arg Ala Glu

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<210> 3616
<211> 392
<212> PRT
<213> Homo sapiens
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5382

305 310 315 320
 Gln Pro Trp Thr Lys Arg Leu Val Met Val Lys Val Val Pro Thr Cys
 325 330 335
 Leu Arg Ala Leu Val Glu Met Ala Arg Val Gly Gly Ala Ser Ser Leu
 340 345 350
 Glu Asn Thr Val Asp Leu His Ile Ser Asn Ser His Pro Leu Ser Leu
 355 360 365
 Thr Ser Asp Gln Tyr Lys Ala Tyr Leu Gln Asp Leu Val Glu Gly Met
 370 375 380
 Asp Phe Gln Gly Pro Gly Glu Ser
 385 390 392

<210> 3617
 <211> 183
 <212> PRT
 <213> Homo sapiens

<400> 3617
 Arg Gly Gly Leu Leu Ser Lys Met Ala Arg Val Leu Lys Ala Ala Ala
 1 5 10 15
 Ala Asn Ala Val Gly Leu Phe Ser Arg Leu Gln Ala Pro Ile Pro Thr
 20 25 30
 Val Arg Ala Ser Ser Thr Ser Gln Pro Leu Asp Gln Val Thr Gly Ser
 35 40 45
 Val Trp Asn Leu Gly Arg Leu Asn His Val Ala Ile Ala Val Pro Asp
 50 55 60
 Leu Glu Lys Ala Ala Ala Phe Tyr Lys Asn Ile Leu Gly Ala Gln Val
 65 70 75 80
 Ser Glu Ala Val Pro Leu Pro Glu His Gly Val Ser Val Val Phe Val
 85 90 95
 Asn Leu Gly Asn Thr Lys Met Glu Leu Leu His Pro Leu Gly Arg Asp
 100 105 110
 Ser Pro Ile Ala Gly Phe Leu Gln Lys Asn Lys Ala Gly Gly Met His
 115 120 125
 His Ile Cys Ile Glu Val Asp Asn Ile Asn Ala Ala Val Met Asp Leu
 130 135 140
 Lys Lys Lys Lys Ile Arg Ser Leu Ser Glu Glu Val Lys Ile Gly Ala
 145 150 155 160
 His Gly Lys Pro Val Ile Phe Leu His Pro Lys Asp Cys Gly Gly Val
 165 170 175
 Leu Val Glu Leu Glu Gln Ala
 180 183

<210> 3618
 <211> 1996
 <212> PRT
 <213> Homo sapiens

<400> 3618
 Asp Asn Ile Asp Glu Thr Tyr Gly Val Asn Val Gln Phe Glu Ser Asp
 1 5 10 15
 Glu Glu Glu Gly Asp Glu Asp Val Tyr Gly Glu Val Arg Glu Glu Ala
 20 25 30
 Ser Asp Asp Asp Met Glu Gly Asp Glu Ala Val Val Arg Cys Thr Leu
 35 40 45
 Ser Ala Asn Met Tyr Val Asp Glu Ile Leu Val Trp Cys Ala Ser Glu
 50 55 60
 Leu Asn Ile Pro Glu Phe Phe Pro Leu Glu Ser Pro His Lys Lys Val

65					70					75				80
Gly	Tyr	Gly	Leu	Ser	Ser	Arg	Thr	Trp	Leu	Gln	Gly	Gly	Gly	Lys Val
				85					90					95
Ile	Glu	Ala	Gly	Arg	Asp	Leu	Leu	Val	Ala	Ser	Gly	Glu	Leu	Met Ser
			100					105					110	
Ser	Lys	Lys	Lys	Asp	Leu	His	Pro	Arg	Asp	Ile	Asp	Ala	Phe	Trp Leu
		115					120					125		
Gln	Arg	Gln	Leu	Ser	Arg	Phe	Tyr	Asp	Asp	Ala	Ile	Val	Ser	Gln Lys
		130				135					140			
Lys	Ala	Asp	Glu	Val	Leu	Glu	Ile	Leu	Lys	Thr	Ala	Ser	Asp	Asp Arg
		145			150					155				160
Glu	Cys	Glu	Asn	Gln	Leu	Val	Leu	Leu	Leu	Gly	Phe	Asn	Thr	Phe Asp
			165					170						175
Phe	Ile	Lys	Val	Leu	Arg	Gln	His	Arg	Met	Met	Ile	Leu	Tyr	Cys Thr
		180						185					190	
Leu	Leu	Ala	Ser	Ala	Gln	Ser	Glu	Ala	Glu	Lys	Glu	Arg	Ile	Met Gly
		195					200					205		
Lys	Met	Glu	Ala	Asp	Pro	Glu	Leu	Ser	Lys	Phe	Leu	Tyr	Gln	Leu His
		210				215						220		
Glu	Thr	Glu	Lys	Glu	Asp	Leu	Ile	Arg	Glu	Glu	Arg	Ser	Arg	Arg Glu
		225			230					235				240
Arg	Val	Arg	Gln	Ser	Arg	Met	Asp	Thr	Asp	Leu	Glu	Thr	Met	Asp Leu
			245						250					255
Asp	Gln	Gly	Gly	Glu	Ala	Leu	Ala	Pro	Arg	Gln	Val	Leu	Asp	Leu Glu
		260						265					270	
Asp	Leu	Val	Phe	Thr	Gln	Gly	Ser	His	Phe	Met	Ala	Asn	Lys	Arg Cys
		275					280					285		
Gln	Leu	Pro	Asp	Gly	Ser	Phe	Arg	Arg	Gln	Arg	Lys	Gly	Tyr	Glu Glu
		290				295					300			
Val	His	Val	Pro	Ala	Leu	Lys	Pro	Lys	Pro	Phe	Gly	Ser	Glu	Glu Gln
		305			310					315				320
Leu	Leu	Pro	Val	Glu	Lys	Leu	Pro	Lys	Tyr	Ala	Gln	Ala	Gly	Phe Glu
			325						330					335
Gly	Phe	Lys	Thr	Leu	Asn	Arg	Ile	Gln	Ser	Lys	Leu	Tyr	Arg	Ala Ala
		340						345					350	
Leu	Glu	Thr	Asp	Glu	Asn	Leu	Leu	Leu	Cys	Ala	Pro	Thr	Gly	Ala Gly
		355					360					365		
Lys	Thr	Asn	Val	Ala	Leu	Met	Cys	Met	Leu	Arg	Glu	Ile	Gly	Lys His
		370				375					380			
Ile	Asn	Met	Asp	Gly	Thr	Ile	Asn	Val	Asp	Asp	Phe	Lys	Ile	Ile Tyr
		385				390				395				400
Ile	Ala	Pro	Met	Arg	Ser	Leu	Val	Gln	Glu	Met	Val	Gly	Ser	Phe Gly
			405						410					415
Lys	Arg	Leu	Ala	Thr	Tyr	Gly	Ile	Thr	Val	Ala	Glu	Leu	Thr	Gly Asp
		420						425					430	
His	Gln	Leu	Cys	Lys	Glu	Glu	Ile	Ser	Ala	Thr	Gln	Ile	Ile	Val Cys
		435					440					445		
Thr	Pro	Glu	Lys	Trp	Asp	Ile	Ile	Thr	Arg	Lys	Gly	Gly	Glu	Arg Thr
		450				455					460			
Tyr	Thr	Gln	Leu	Val	Arg	Leu	Ile	Ile	Leu	Asp	Glu	Ile	His	Leu Leu
		465			470					475				480
His	Asp	Asp	Arg	Gly	Pro	Val	Leu	Glu	Ala	Leu	Val	Ala	Arg	Ala Ile
			485						490					495
Arg	Asn	Ile	Glu	Met	Thr	Gln	Glu	Asp	Val	Arg	Leu	Ile	Gly	Leu Ser
			500					505					510	
Ala	Thr	Leu	Pro	Asn	Tyr	Glu	Asp	Val	Ala	Thr	Phe	Leu	Arg	Val Asp
		515					520					525		
Pro	Ala	Lys	Gly	Leu	Phe	Tyr	Phe	Asp	Asn	Ser	Phe	Arg	Pro	Val Pro
		530				535					540			
Leu	Glu	Gln	Thr	Tyr	Val	Gly	Ile	Thr	Glu	Lys	Lys	Ala	Ile	Lys Arg
		545			550					555				560
Phe	Gln	Ile	Met	Asn	Glu	Ile	Val	Tyr	Glu	Lys	Ile	Met	Glu	His Ala
			565						570					575
Gly	Lys	Asn	Gln	Val	Leu	Val	Phe	Val	His	Ser	Arg	Lys	Glu	Thr Gly

580										585					590						
Lys	Thr	Ala	Arg	Ala	Ile	Arg	Asp	Met	Cys	Leu	Glu	Lys	Asp	Thr	Leu						
		595					600						605								
Gly	Leu	Phe	Leu	Arg	Glu	Gly	Ser	Ala	Ser	Thr	Glu	Val	Leu	Arg	Thr						
		610					615					620									
Glu	Ala	Glu	Gln	Cys	Lys	Asn	Leu	Glu	Leu	Lys	Asp	Leu	Leu	Pro	Tyr						
625					630					635					640						
Gly	Phe	Ala	Ile	His	His	Ala	Gly	Met	Thr	Arg	Val	Asp	Arg	Thr	Leu						
				645					650					655							
Val	Glu	Asp	Leu	Phe	Gly	Asp	Lys	His	Ile	Gln	Val	Leu	Val	Ser	Thr						
			660					665					670								
Ala	Thr	Leu	Ala	Trp	Gly	Val	Asn	Leu	Pro	Ala	His	Thr	Val	Ile	Ile						
		675					680					685									
Lys	Gly	Thr	Gln	Val	Tyr	Ser	Pro	Glu	Lys	Gly	Arg	Trp	Thr	Glu	Leu						
		690				695					700										
Gly	Ala	Leu	Asp	Ile	Leu	Gln	Met	Leu	Gly	Arg	Ala	Gly	Arg	Pro	Gln						
705					710					715				720							
Tyr	Asp	Thr	Lys	Gly	Glu	Gly	Ile	Leu	Ile	Thr	Ser	His	Gly	Glu	Leu						
				725					730					735							
Gln	Tyr	Tyr	Leu	Ser	Leu	Leu	Asn	Gln	Gln	Leu	Pro	Ile	Glu	Ser	Gln						
			740					745					750								
Met	Val	Ser	Lys	Leu	Pro	Asp	Met	Leu	Asn	Ala	Glu	Ile	Val	Leu	Gly						
		755					760					765									
Asn	Val	Gln	Asn	Ala	Lys	Asp	Ala	Val	Asn	Trp	Leu	Gly	Tyr	Ala	Tyr						
		770				775					780										
Leu	Tyr	Ile	Arg	Met	Leu	Arg	Ser	Pro	Thr	Leu	Tyr	Gly	Ile	Ser	His						
785					790					795				800							
Asp	Asp	Leu	Lys	Gly	Asp	Pro	Leu	Leu	Asp	Gln	Arg	Arg	Leu	Asp	Leu						
				805					810					815							
Val	His	Thr	Ala	Ala	Leu	Met	Leu	Asp	Lys	Asn	Asn	Leu	Val	Lys	Tyr						
			820					825					830								
Asp	Lys	Lys	Thr	Gly	Asn	Phe	Gln	Val	Thr	Glu	Leu	Gly	Arg	Ile	Ala						
		835					840					845									
Ser	His	Tyr	Tyr	Ile	Thr	Asn	Asp	Thr	Val	Gln	Thr	Tyr	Asn	Gln	Leu						
		850				855					860										
Leu	Lys	Pro	Thr	Leu	Ser	Glu	Ile	Glu	Leu	Phe	Arg	Val	Phe	Ser	Leu						
865					870					875				880							
Ser	Ser	Glu	Phe	Lys	Asn	Ile	Thr	Val	Arg	Glu	Glu	Glu	Lys	Leu	Glu						
				885					890					895							
Leu	Gln	Lys	Leu	Glu	Arg	Val	Pro	Ile	Pro	Val	Lys	Glu	Ser	Ile							
			900				905						910								
Glu	Glu	Pro	Ser	Ala	Lys	Ile	Asn	Val	Leu	Leu	Gln	Ala	Phe	Ile	Ser						
		915					920					925									
Gln	Leu	Lys	Leu	Glu	Gly	Phe	Ala	Leu	Met	Ala	Asp	Met	Val	Tyr	Val						
		930				935					940										
Thr	Gln	Ser	Ala	Gly	Arg	Leu	Met	Arg	Ala	Ile	Phe	Glu	Ile	Val	Leu						
945					950					955				960							
Asn	Arg	Gly	Trp	Ala	Gln	Leu	Thr	Asp	Lys	Thr	Leu	Asn	Leu	Cys	Lys						
				965					970					975							
Met	Ile	Asp	Lys	Arg	Met	Trp	Gln	Ser	Met	Cys	Pro	Leu	Arg	Gln	Phe						
			980					985					990								
Arg	Lys	Leu	Pro	Glu	Glu	Val	Val	Lys	Lys	Ile	Glu	Lys	Lys	Asn	Phe						
		995				1000					1005										
Pro	Phe	Glu	Arg	Leu	Tyr	Asp	Leu	Asn	His	Asn	Glu	Ile	Gly	Glu	Leu						
		1010				1015					1020										
Ile	Arg	Met	Pro	Lys	Met	Gly	Lys	Thr	Ile	His	Lys	Tyr	Val	His	Leu						
1025				1030					1035					1040							
Phe	Pro	Lys	Leu	Glu	Leu	Ser	Val	His	Leu	Gln	Pro	Ile	Thr	Arg	Ser						
				1045					1050				1055								
Thr	Leu	Lys	Val	Glu	Leu	Thr	Ile	Thr	Pro	Asp	Phe	Gln	Trp	Asp	Glu						
			1060					1065					1070								
Lys	Val	His	Gly	Ser	Ser	Glu	Ala	Phe	Trp	Ile	Leu	Val	Glu	Asp	Val						
		1075					1080					1085									
Asp	Ser	Glu	Val	Ile	Leu	His	His	Glu	Tyr	Phe	Leu	Leu	Lys	Ala	Lys						

1090	1095	1100
Tyr Ala Gln Asp Glu His Leu Ile Thr Phe Phe Val Pro Val Phe Glu		
1105	1110	1115
Pro Leu Pro Pro Gln Tyr Phe Ile Arg Val Val Ser Asp Arg Trp Leu		1120
	1125	1130
Ser Cys Glu Thr Gln Leu Pro Val Ser Phe Arg His Leu Ile Leu Pro		1135
	1140	1145
Glu Lys Tyr Pro Pro Pro Thr Glu Leu Leu Asp Leu Gln Pro Leu Pro		1150
	1155	1160
Val Ser Ala Leu Arg Asn Ser Ala Phe Glu Ser Leu Tyr Gln Asp Lys		1165
	1170	1175
Phe Pro Phe Phe Asn Pro Ile Gln Thr Gln Val Phe Asn Thr Val Tyr		1180
1185	1190	1195
Asn Ser Asp Asp Asn Val Phe Val Gly Ala Pro Thr Gly Ser Gly Lys		1200
	1205	1210
Thr Ile Cys Ala Glu Phe Ala Ile Leu Arg Met Leu Leu Gln Asn Ser		1215
	1220	1225
Glu Gly Arg Cys Val Tyr Ile Thr Pro Met Arg Leu Trp Gln Glu Gln		1230
	1235	1240
Val Tyr Met Asp Trp Tyr Glu Lys Phe Gln Asp Arg Leu Asn Lys Lys		1245
	1250	1255
Val Val Leu Leu Thr Gly Glu Thr Ser Thr Asp Leu Lys Leu Leu Gly		1260
1265	1270	1275
Lys Gly Asn Ile Ile Ile Ser Thr Pro Glu Lys Trp Asp Ile Leu Ser		1280
	1285	1290
Arg Arg Trp Lys Gln Arg Lys Asn Val Gln Asn Ile Asn Leu Phe Val		1295
	1300	1305
Val Asp Glu Val His Leu Ile Gly Glu Asn Gly Pro Val Leu Glu		1310
	1315	1320
Val Ile Cys Ser Arg Met Arg Tyr Ile Ser Ser Gln Ile Glu Arg Pro		1325
	1330	1335
Ile Arg Ile Val Ala Leu Ser Ser Ser Leu Ser Asn Ala Lys Asp Val		1340
1345	1350	1355
Ala His Trp Leu Gly Cys Ser Ala Thr Ser Thr Phe Asn Phe His Pro		1360
	1365	1370
Asn Val Arg Pro Val Pro Leu Glu Leu His Ile Gln Gly Phe Asn Ile		1375
	1380	1385
Ser His Thr Gln Thr Arg Leu Leu Ser Met Ala Lys Pro Val Phe His		1390
	1395	1400
Ala Ile Thr Lys His Ser Pro Lys Lys Pro Val Ile Val Phe Val Pro		1405
	1410	1415
Ser Arg Lys Gln Thr Arg Leu Thr Ala Ile Asp Ile Leu Thr Thr Cys		1420
1425	1430	1435
Ala Ala Asp Ile Gln Arg Gln Arg Phe Leu His Cys Thr Glu Lys Asp		1440
	1445	1450
Leu Ile Pro Tyr Leu Glu Lys Leu Ser Asp Ser Thr Leu Lys Glu Thr		1455
	1460	1465
Leu Leu Asn Gly Val Gly Tyr Leu His Glu Gly Leu Ser Pro Met Glu		1470
	1475	1480
Arg Arg Leu Val Glu Gln Leu Phe Ser Ser Gly Ala Ile Gln Val Val		1485
	1490	1495
Val Ala Ser Arg Ser Leu Cys Trp Gly Met Asn Val Ala Ala His Leu		1500
1505	1510	1515
Val Ile Ile Met Asp Thr Leu Tyr Tyr Asn Gly Lys Ile His Ala Tyr		1520
	1525	1530
Val Asp Tyr Pro Ile Tyr Asp Val Leu Gln Met Val Gly His Ala Asn		1535
	1540	1545
Arg Pro Leu Gln Asp Asp Glu Gly Arg Cys Val Ile Met Cys Gln Gly		1550
	1555	1560
Ser Lys Lys Asp Phe Phe Lys Lys Phe Leu Tyr Glu Pro Leu Pro Val		1565
	1570	1575
Glu Ser His Leu Asp His Cys Met His Asp His Phe Asn Ala Glu Ile		1580
1585	1590	1595
Val Thr Lys Thr Ile Glu Asn Lys Gln Asp Ala Val Asp Tyr Leu Thr		1600

1605 1610 1615
 Trp Thr Phe Leu Tyr Arg Arg Met Thr Gln Asn Pro Asn Tyr Tyr Asn
 1620 1625 1630
 Leu Gln Gly Ile Ser His Arg His Leu Ser Asp His Leu Ser Glu Leu
 1635 1640 1645
 Val Glu Gln Thr Leu Ser Asp Leu Glu Gln Ser Lys Cys Ile Ser Ile
 1650 1655 1660
 Glu Asp Glu Met Asp Val Ala Pro Leu Asn Leu Gly Met Ile Ala Ala
 1665 1670 1675 1680
 Tyr Tyr Tyr Ile Asn Tyr Thr Thr Ile Glu Leu Phe Ser Met Ser Leu
 1685 1690 1695
 Asn Ala Lys Thr Lys Val Arg Gly Leu Ile Glu Ile Ile Ser Asn Ala
 1700 1705 1710
 Ala Glu Tyr Glu Asn Ile Pro Ile Arg His His Glu Asp Asn Leu Leu
 1715 1720 1725
 Arg Gln Leu Ala Gln Lys Val Pro His Lys Leu Asn Asn Pro Lys Phe
 1730 1735 1740
 Asn Asp Pro His Val Lys Thr Asn Leu Leu Leu Gln Ala His Leu Ser
 1745 1750 1755 1760
 Arg Met Gln Leu Ser Ala Glu Leu Gln Ser Asp Thr Glu Glu Ile Leu
 1765 1770 1775
 Ser Lys Ala Ile Arg Leu Ile Gln Ala Cys Val Asp Val Leu Ser Ser
 1780 1785 1790
 Asn Gly Trp Leu Ser Pro Ala Leu Ala Ala Met Glu Leu Ala Gln Met
 1795 1800 1805
 Val Thr Gln Ala Met Trp Ser Glu Asp Ser Tyr Leu Arg Arg Leu Pro
 1810 1815 1820
 Pro Phe Pro Ser Gly Leu Phe Lys Arg Cys Thr Asp Lys Gly Val Glu
 1825 1830 1835 1840
 Ser Val Phe Asp Ile Met Glu Met Glu Asp Glu Glu Arg Asn Ala Leu
 1845 1850 1855
 Leu Gln Leu Thr Asp Ser Gln Ile Ala Asp Val Ala Arg Phe Cys Asn
 1860 1865 1870
 Arg Tyr Pro Asn Ile Glu Leu Ser Tyr Glu Val Val Asp Lys Asp Ser
 1875 1880 1885
 Ile Arg Ser Gly Gly Pro Val Val Val Leu Val Gln Leu Glu Arg Glu
 1890 1895 1900
 Glu Glu Val Thr Gly Pro Val Ile Ala Pro Leu Phe Pro Gln Lys Arg
 1905 1910 1915 1920
 Glu Glu Gly Trp Trp Val Val Ile Gly Asp Ala Lys Ser Asn Ser Leu
 1925 1930 1935
 Ile Ser Ile Lys Arg Leu Thr Leu Gln Gln Lys Ala Lys Val Lys Leu
 1940 1945 1950
 Asp Phe Val Ala Pro Ala Thr Gly Gly Arg His Asn Thr Leu Tyr Phe
 1955 1960 1965
 Met Ser Asp Ala Tyr Met Gly Cys Asp Gln Glu Tyr Lys Phe Ser Val
 1970 1975 1980
 Asp Val Lys Glu Ala Glu Thr Asp Ser Asp Ser Asp
 1985 1990 1995 1996

<210> 3619
 <211> 1996
 <212> PRT
 <213> Homo sapiens

<400> 3619
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 1 5 10 15
 Glu Glu Glu Gly Asp Glu Asp Val Tyr Gly Glu Val Arg Glu Glu Ala
 20 25 30
 Ser Asp Asp Asp Met Glu Gly Asp Glu Ala Val Val Arg Cys Thr Leu

[illegible]

545		550		555		560									
Phe	Gln	Ile	Met	Asn	Glu	Ile	Val	Tyr	Glu	Lys	Ile	Met	Glu	His	Ala
			565						570					575	
Gly	Lys	Asn	Gln	Val	Leu	Val	Phe	Val	His	Ser	Arg	Lys	Glu	Thr	Gly
			580						585					590	
Lys	Thr	Ala	Arg	Ala	Ile	Arg	Asp	Met	Cys	Leu	Glu	Lys	Asp	Thr	Leu
			595					600					605		
Gly	Leu	Phe	Leu	Arg	Glu	Gly	Ser	Ala	Ser	Thr	Glu	Val	Leu	Arg	Thr
			610				615					620			
Glu	Ala	Glu	Gln	Cys	Lys	Asn	Leu	Glu	Leu	Lys	Asp	Leu	Leu	Pro	Tyr
			625				630				635				640
Gly	Phe	Ala	Ile	His	His	Ala	Gly	Met	Thr	Arg	Val	Asp	Arg	Thr	Leu
				645					650					655	
Val	Glu	Asp	Leu	Phe	Gly	Asp	Lys	His	Ile	Gln	Val	Leu	Val	Ser	Thr
			660					665					670		
Ala	Thr	Leu	Ala	Trp	Gly	Val	Asn	Leu	Pro	Ala	His	Thr	Val	Ile	Ile
			675				680					685			
Lys	Gly	Thr	Gln	Val	Tyr	Ser	Pro	Glu	Lys	Gly	Arg	Trp	Thr	Glu	Leu
			690				695				700				
Gly	Ala	Leu	Asp	Ile	Leu	Gln	Met	Leu	Gly	Arg	Ala	Gly	Arg	Pro	Gln
				710					715					720	
Tyr	Asp	Thr	Lys	Gly	Glu	Gly	Ile	Leu	Ile	Thr	Ser	His	Gly	Glu	Leu
				725					730					735	
Gln	Tyr	Tyr	Leu	Ser	Leu	Leu	Asn	Gln	Gln	Leu	Pro	Ile	Glu	Ser	Gln
			740				745						750		
Met	Val	Ser	Lys	Leu	Pro	Asp	Met	Leu	Asn	Ala	Glu	Ile	Val	Leu	Gly
			755				760					765			
Asn	Val	Gln	Asn	Ala	Lys	Asp	Ala	Val	Asn	Trp	Leu	Gly	Tyr	Ala	Tyr
			770				775					780			
Leu	Tyr	Ile	Arg	Met	Leu	Arg	Ser	Pro	Thr	Leu	Tyr	Gly	Ile	Ser	His
				790					795					800	
Asp	Asp	Leu	Lys	Gly	Asp	Pro	Leu	Leu	Asp	Gln	Arg	Arg	Leu	Asp	Leu
				805					810					815	
Val	His	Thr	Ala	Ala	Leu	Met	Leu	Asp	Lys	Asn	Asn	Leu	Val	Lys	Tyr
			820						825				830		
Asp	Lys	Lys	Thr	Gly	Asn	Phe	Gln	Val	Thr	Glu	Leu	Gly	Arg	Ile	Ala
			835				840					845			
Ser	His	Tyr	Tyr	Ile	Thr	Asn	Asp	Thr	Val	Gln	Thr	Tyr	Asn	Gln	Leu
			850				855					860			
Leu	Lys	Pro	Thr	Leu	Ser	Glu	Ile	Glu	Leu	Phe	Arg	Val	Phe	Ser	Leu
				870					875					880	
Ser	Ser	Glu	Phe	Lys	Asn	Ile	Thr	Val	Arg	Glu	Glu	Glu	Lys	Leu	Glu
				885					890					895	
Leu	Gln	Lys	Leu	Leu	Glu	Arg	Val	Pro	Ile	Pro	Val	Lys	Glu	Ser	Ile
			900						905				910		
Glu	Glu	Pro	Ser	Ala	Lys	Ile	Asn	Val	Leu	Leu	Gln	Ala	Phe	Ile	Ser
			915				920					925			
Gln	Leu	Lys	Leu	Glu	Gly	Phe	Ala	Leu	Met	Ala	Asp	Met	Val	Tyr	Val
			930				935					940			
Thr	Gln	Ser	Ala	Gly	Arg	Leu	Met	Arg	Ala	Ile	Phe	Glu	Ile	Val	Leu
				950					955					960	
Asn	Arg	Gly	Trp	Ala	Gln	Leu	Thr	Asp	Lys	Thr	Leu	Asn	Leu	Cys	Lys
				965					970					975	
Met	Ile	Asp	Lys	Arg	Met	Trp	Gln	Ser	Met	Cys	Pro	Leu	Arg	Gln	Phe
			980						985				990		
Arg	Lys	Leu	Pro	Glu	Glu	Val	Val	Lys	Lys	Ile	Glu	Lys	Lys	Asn	Phe
			995				1000					1005			
Pro	Phe	Glu	Arg	Leu	Tyr	Asp	Leu	Asn	His	Asn	Glu	Ile	Gly	Glu	Leu
			1010				1015					1020			
Ile	Arg	Met	Pro	Lys	Met	Gly	Lys	Thr	Ile	His	Lys	Tyr	Val	His	Leu
			1025				1030				1035			1040	
Phe	Pro	Lys	Leu	Glu	Leu	Ser	Val	His	Leu	Gln	Pro	Ile	Thr	Arg	Ser
				1045					1050					1055	
Thr	Leu	Lys	Val	Glu	Leu	Thr	Ile	Thr	Pro	Asp	Phe	Gln	Trp	Asp	Glu

1060	1065	1070
Lys Val His Gly Ser Ser Glu Ala Phe Trp Ile Leu Val Glu Asp Val		
1075	1080	1085
Asp Ser Glu Val Ile Leu His His Glu Tyr Phe Leu Leu Lys Ala Lys		
1090	1095	1100
Tyr Ala Gln Asp Glu His Leu Ile Thr Phe Phe Val Pro Val Phe Glu		
1105	1110	1115
Pro Leu Pro Pro Gln Tyr Phe Ile Arg Val Val Ser Asp Arg Trp Leu		1120
1125	1130	1135
Ser Cys Glu Thr Gln Leu Pro Val Ser Phe Arg His Leu Ile Leu Pro		
1140	1145	1150
Glu Lys Tyr Pro Pro Pro Thr Glu Leu Leu Asp Leu Gln Pro Leu Pro		
1155	1160	1165
Val Ser Ala Leu Arg Asn Ser Ala Phe Glu Ser Leu Tyr Gln Asp Lys		
1170	1175	1180
Phe Pro Phe Phe Asn Pro Ile Gln Thr Gln Val Phe Asn Thr Val Tyr		
1185	1190	1195
Asn Ser Asp Asp Asn Val Phe Val Gly Ala Pro Thr Gly Ser Gly Lys		1200
1205	1210	1215
Thr Ile Cys Ala Glu Phe Ala Ile Leu Arg Met Leu Leu Gln Asn Ser		
1220	1225	1230
Glu Gly Arg Cys Val Tyr Ile Thr Pro Met Arg Leu Trp Gln Glu Gln		
1235	1240	1245
Val Tyr Met Asp Trp Tyr Glu Lys Phe Gln Asp Arg Leu Asn Lys Lys		
1250	1255	1260
Val Val Leu Leu Thr Gly Glu Thr Ser Thr Asp Leu Lys Leu Leu Gly		
1265	1270	1275
Lys Gly Asn Ile Ile Ser Thr Pro Glu Lys Trp Asp Ile Leu Ser		1280
1285	1290	1295
Arg Arg Trp Lys Gln Arg Lys Asn Val Gln Asn Ile Asn Leu Phe Val		
1300	1305	1310
Val Asp Glu Val His Leu Ile Gly Gly Glu Asn Gly Pro Val Leu Glu		
1315	1320	1325
Val Ile Cys Ser Arg Met Arg Tyr Ile Ser Ser Gln Ile Glu Arg Pro		
1330	1335	1340
Ile Arg Ile Val Ala Leu Ser Ser Ser Leu Ser Asn Ala Lys Asp Val		
1345	1350	1355
Ala His Trp Leu Gly Cys Ser Ala Thr Ser Thr Phe Asn Phe His Pro		1360
1365	1370	1375
Asn Val Arg Pro Val Pro Leu Glu Leu His Ile Gln Gly Phe Asn Ile		
1380	1385	1390
Ser His Thr Gln Thr Arg Leu Leu Ser Met Ala Lys Pro Val Phe His		
1395	1400	1405
Ala Ile Thr Lys His Ser Pro Lys Lys Pro Val Ile Val Phe Val Pro		
1410	1415	1420
Ser Arg Lys Gln Thr Arg Leu Thr Ala Ile Asp Ile Leu Thr Thr Cys		
1425	1430	1435
Ala Ala Asp Ile Gln Arg Gln Arg Phe Leu His Cys Thr Glu Lys Asp		1440
1445	1450	1455
Leu Ile Pro Tyr Leu Glu Lys Leu Ser Asp Ser Thr Leu Lys Glu Thr		
1460	1465	1470
Leu Leu Asn Gly Val Gly Tyr Leu His Glu Gly Leu Ser Pro Met Glu		
1475	1480	1485
Arg Arg Leu Val Glu Gln Leu Phe Ser Ser Gly Ala Ile Gln Val Val		
1490	1495	1500
Val Ala Ser Arg Ser Leu Cys Trp Gly Met Asn Val Ala Ala His Leu		
1505	1510	1515
Val Ile Ile Met Asp Thr Leu Tyr Tyr Asn Gly Lys Ile His Ala Tyr		1520
1525	1530	1535
Val Asp Tyr Pro Ile Tyr Asp Val Leu Gln Met Val Gly His Ala Asn		
1540	1545	1550
Arg Pro Leu Gln Asp Asp Glu Gly Arg Cys Val Ile Met Cys Gln Gly		
1555	1560	1565
Ser Lys Lys Asp Phe Phe Lys Lys Phe Leu Tyr Glu Pro Leu Pro Val		

1570 1575 1580
 Glu Ser His Leu Asp His Cys Met His Asp His Phe Asn Ala Glu Ile
 1585 1590 1595 1600
 Val Thr Lys Thr Ile Glu Asn Lys Gln Asp Ala Val Asp Tyr Leu Thr
 1605 1610 1615
 Trp Thr Phe Leu Tyr Arg Arg Met Thr Gln Asn Pro Asn Tyr Tyr Asn
 1620 1625 1630
 Leu Gln Gly Ile Ser His Arg His Leu Ser Asp His Leu Ser Glu Leu
 1635 1640 1645
 Val Glu Gln Thr Leu Ser Asp Leu Glu Gln Ser Lys Cys Ile Ser Ile
 1650 1655 1660
 Glu Asp Glu Met Asp Val Ala Pro Leu Asn Leu Gly Met Ile Ala Ala
 1665 1670 1675 1680
 Tyr Tyr Tyr Ile Asn Tyr Thr Thr Ile Glu Leu Phe Ser Met Ser Leu
 1685 1690 1695
 Asn Ala Lys Thr Lys Val Arg Gly Leu Ile Glu Ile Ile Ser Asn Ala
 1700 1705 1710
 Ala Glu Tyr Glu Asn Ile Pro Ile Arg His His Glu Asp Asn Leu Leu
 1715 1720 1725
 Arg Gln Leu Ala Gln Lys Val Pro His Lys Leu Asn Asn Pro Lys Phe
 1730 1735 1740
 Asn Asp Pro His Val Lys Thr Asn Leu Leu Leu Gln Ala His Leu Ser
 1745 1750 1755 1760
 Arg Met Gln Leu Ser Ala Glu Leu Gln Ser Asp Thr Glu Glu Ile Leu
 1765 1770 1775
 Ser Lys Ala Ile Arg Leu Ile Gln Ala Cys Val Asp Val Leu Ser Ser
 1780 1785 1790
 Asn Gly Trp Leu Ser Pro Ala Leu Ala Ala Met Glu Leu Ala Gln Met
 1795 1800 1805
 Val Thr Gln Ala Met Trp Ser Glu Asp Ser Tyr Leu Arg Arg Leu Pro
 1810 1815 1820
 Pro Phe Pro Ser Gly Leu Phe Lys Arg Cys Thr Asp Lys Gly Val Glu
 1825 1830 1835 1840
 Ser Val Phe Asp Ile Met Glu Met Glu Asp Glu Glu Arg Asn Ala Leu
 1845 1850 1855
 Leu Gln Leu Thr Asp Ser Gln Ile Ala Asp Val Ala Arg Phe Cys Asn
 1860 1865 1870
 Arg Tyr Pro Asn Ile Glu Leu Ser Tyr Glu Val Val Asp Lys Asp Ser
 1875 1880 1885
 Ile Arg Ser Gly Gly Pro Val Val Val Leu Val Gln Leu Glu Arg Glu
 1890 1895 1900
 Glu Glu Val Thr Gly Pro Val Ile Ala Pro Leu Phe Pro Gln Lys Arg
 1905 1910 1915 1920
 Glu Glu Gly Trp Trp Val Val Ile Gly Asp Ala Lys Ser Asn Ser Leu
 1925 1930 1935
 Ile Ser Ile Lys Arg Leu Thr Leu Gln Gln Lys Ala Lys Val Lys Leu
 1940 1945 1950
 Asp Phe Val Ala Pro Ala Thr Gly Arg His Asn Thr Leu Tyr Phe
 1955 1960 1965
 Met Ser Asp Ala Tyr Met Gly Cys Asp Gln Glu Tyr Lys Phe Ser Val
 1970 1975 1980
 Asp Val Lys Glu Ala Glu Thr Asp Ser Asp Ser Asp
 1985 1990 19951996

<210> 3620

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3620

Val Ile Lys Met Ala Leu Ala Ala Arg Leu Leu Pro Gln Phe Leu His

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Ala Glu Val Arg Leu Pro Ser Ala Thr Leu Cys Tyr Phe Cys Arg Cys
      35           40           45
Arg Leu Gly Leu Gly Ala Ala Leu Phe Pro Arg Ser Ala Arg Ala Leu
      50           55           60
Ala Ala Ser Ala Leu Pro Ala Gln Gly Ser Arg Trp Pro Val Leu Ser
      65           70           75           80
Ser Pro Gly Leu Pro Ala Ala Phe Ala Ser Phe Pro Ala Cys Pro Gln
      85           90           95
Arg Ser Tyr Ser Thr Glu Glu Lys Pro Gln Gln His Gln Lys Thr Lys
      100          105          110
Met Ile Val Leu Gly Phe Ser Asn Pro Ile Asn Trp Val Arg Thr Arg
      115          120          125
Ile Lys Ala Phe Leu Ile Trp Ala Tyr Phe Asp Lys Glu Phe Ser Ile
      130          135          140
Thr Glu Phe Ser Glu Gly Ala Lys Gln Ala Phe Ala His Val Ser Lys
      145          150          155          160
Leu Leu Ser Gln Cys Lys Phe Asp Leu Leu Glu Glu Leu Val Ala Lys
      165          170          175
Glu Val Leu His Ala Leu Lys Glu Lys Val Thr Ser Leu Pro Asp Asn
      180          185          190
His Lys Asn Ala Leu Ala Ala Asn Ile Asp Glu Ile Val Phe Thr Ser
      195          200          205
Thr Gly Asp Ile Ser Ile Tyr Tyr Asp Glu Lys Gly Arg Lys Phe Val
      210          215          220
Asn Ile Leu Met Cys Phe Trp Tyr Leu Thr Ser Ala Asn Ile Pro Ser
      225          230          235          240
Glu Thr Leu Arg Gly Ala Ser Val Phe Gln Val Lys Leu Gly Asn Gln
      245          250          255
Asn Val Glu Thr Lys Gln Leu Leu Ser Ala Ser Tyr Glu Phe Gln Arg
      260          265          270
Glu Phe Thr Gln Gly Val Lys Pro Asp Trp Thr Ile Ala Arg Ile Glu
      275          280          285
His Ser Lys Leu Leu Glu
      290          294

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<210> 3621

<211> 1106

<212> PRT

<213> Homo sapiens

<400> 3621

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      20           25           30
Ala Ala Ala Ala Ala Ala Ala Lys Met Asp Gly Lys Glu Ser Ser Tyr
      35           40           45
Glu Arg Ser Gly Ser Tyr Ser Gly Arg Ser Pro Ser Pro Tyr Gly Arg
      50           55           60
Arg Arg Ser Ser Ser Pro Phe Leu Ser Lys Arg Ser Leu Ser Arg Ser
      65           70           75           80
Pro Leu Pro Ser Arg Lys Ser Met Lys Ser Arg Ser Arg Ser Pro Ala
      85           90           95
Tyr Ser Arg His Ser Ser Ser His Ser Lys Lys Lys Arg Ser Ser Ser
      100          105          110
Arg Ser Arg His Ser Ser Ile Ser Pro Val Arg Leu Pro Leu Asn Ser
      115          120          125
Ser Leu Gly Ala Glu Leu Ser Arg Lys Lys Lys Glu Arg Ala Ala Ala

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130	135	140
Ala Ala Ala Ala Lys Met Asp Gly Lys Glu Ser Ser Tyr Glu Arg Ser		
145	150	155
Gly Ser Tyr Ser Gly Arg Ser Pro Ser Pro Tyr Gly Arg Arg Arg Ser		160
	165	170
Ser Ser Pro Phe Leu Ser Lys Arg Ser Leu Ser Arg Ser Pro Leu Pro		175
	180	185
Ser Arg Lys Ser Met Lys Ser Arg Ser Arg Ser Pro Ala Tyr Ser Arg		190
	195	200
His Ser Ser Ser His Ser Lys Lys Lys Arg Ser Ser Ser Arg Ser Arg		205
	210	215
His Ser Ser Ile Ser Pro Val Arg Leu Pro Leu Asn Ser Ser Leu Gly		220
225	230	235
Ala Glu Leu Ser Arg Lys Lys Lys Glu Arg Ala Ala Ala Ala Ala		240
	245	250
Ala Lys Met Asp Gly Lys Glu Ser Lys Gly Ser Pro Val Phe Leu Pro		255
	260	265
Arg Lys Glu Asn Ser Ser Val Glu Ala Lys Asp Ser Gly Leu Glu Ser		270
	275	280
Lys Lys Leu Pro Arg Ser Val Lys Leu Glu Lys Ser Ala Pro Asp Thr		285
	290	295
Glu Leu Val Asn Val Thr His Leu Asn Thr Glu Val Lys Asn Ser Ser		300
305	310	315
Asp Thr Gly Lys Val Lys Leu Asp Glu Asn Ser Glu Lys His Leu Val		320
	325	330
Lys Asp Leu Lys Ala Gln Gly Thr Arg Asp Ser Lys Pro Ile Ala Leu		335
	340	345
Lys Glu Glu Ile Val Thr Pro Lys Glu Thr Glu Thr Ser Glu Lys Glu		350
	355	360
Thr Pro Pro Pro Leu Pro Thr Ile Ala Ser Pro Pro Pro Pro Leu Pro		365
	370	375
Thr Thr Thr Pro Pro Pro Gln Thr Pro Pro Leu Pro Pro Leu Pro Pro		380
385	390	395
Ile Pro Ala Leu Pro Gln Gln Pro Pro Leu Pro Pro Ser Gln Pro Ala		400
	405	410
Phe Ser Gln Val Pro Ala Ser Ser Thr Ser Thr Leu Pro Pro Ser Thr		415
	420	425
His Ser Lys Thr Ser Ala Val Ser Ser Gln Ala Asn Ser Gln Pro Pro		430
	435	440
Val Gln Val Ser Val Lys Thr Gln Val Ser Val Thr Ala Ala Ile Pro		445
	450	455
His Leu Lys Thr Ser Thr Leu Pro Pro Leu Pro Leu Pro Pro Leu Leu		460
465	470	475
Pro Gly Asp Asp Asp Met Asp Ser Pro Lys Glu Thr Leu Pro Ser Lys		480
	485	490
Pro Val Lys Lys Glu Lys Glu Gln Arg Thr Arg His Leu Leu Thr Asp		495
	500	505
Leu Pro Leu Pro Pro Glu Leu Pro Gly Gly Asp Leu Ser Pro Pro Asp		510
	515	520
Ser Pro Glu Pro Lys Ala Ile Thr Pro Pro Gln Gln Pro Tyr Lys Lys		525
	530	535
Arg Pro Lys Ile Cys Cys Pro Arg Tyr Gly Glu Arg Arg Gln Thr Glu		540
545	550	555
Ser Asp Trp Gly Lys Arg Cys Val Asp Lys Phe Asp Ile Ile Gly Ile		560
	565	570
Ile Gly Glu Gly Thr Tyr Gly Gln Val Tyr Lys Ala Lys Asp Lys Asp		575
	580	585
Thr Gly Glu Leu Val Ala Leu Lys Lys Val Arg Leu Asp Asn Glu Lys		590
	595	600
Glu Gly Phe Pro Ile Thr Ala Ile Arg Glu Ile Lys Ile Leu Arg Gln		605
	610	615
Leu Ile His Arg Ser Val Val Asn Met Lys Glu Ile Val Thr Asp Lys		620
625	630	635
Gln Asp Ala Leu Asp Phe Lys Lys Asp Lys Gly Ala Phe Tyr Leu Val		640

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        645                650                655
Phe Glu Tyr Met Asp His Asp Leu Met Gly Leu Leu Glu Ser Gly Leu
        660                665                670
Val His Phe Ser Glu Asp His Ile Lys Ser Phe Met Lys Gln Leu Met
        675                680                685
Glu Gly Leu Glu Tyr Cys His Lys Lys Asn Phe Leu His Arg Asp Ile
        690                695                700
Lys Cys Ser Asn Ile Leu Leu Asn Asn Ser Gly Gln Ile Lys Leu Ala
705                710                715                720
Asp Phe Gly Leu Ala Arg Leu Tyr Asn Ser Glu Glu Ser Arg Pro Tyr
        725                730                735
Thr Asn Lys Val Ile Thr Leu Trp Tyr Arg Pro Pro Lys Leu Leu Leu
        740                745                750
Gly Glu Glu Arg Tyr Thr Pro Ala Ile Asp Val Trp Ser Cys Gly Cys
        755                760                765
Ile Leu Gly Glu Leu Phe Thr Lys Lys Pro Ile Phe Gln Ala Asn Leu
        770                775                780
Glu Leu Ala Gln Leu Glu Leu Ile Ser Arg Leu Cys Gly Ser Pro Cys
785                790                795                800
Pro Ala Val Trp Pro Asp Val Ile Lys Leu Pro Tyr Phe Asn Thr Met
        805                810                815
Lys Pro Lys Lys Gln Tyr Arg Arg Arg Leu Arg Glu Glu Phe Ser Phe
        820                825                830
Ile Pro Ser Ala Ala Leu Asp Leu Leu Asp His Met Leu Thr Leu Asp
        835                840                845
Pro Ser Lys Arg Cys Thr Ala Glu Gln Thr Leu Gln Ser Asp Phe Leu
        850                855                860
Lys Asp Val Glu Leu Ser Lys Met Ala Pro Pro Asp Leu Pro His Trp
865                870                875                880
Gln Asp Cys His Glu Leu Trp Ser Lys Lys Arg Arg Arg Gln Arg Gln
        885                890                895
Ser Gly Val Val Val Glu Glu Pro Pro Pro Ser Lys Thr Ser Arg Lys
        900                905                910
Glu Thr Thr Ser Gly Thr Ser Thr Glu Pro Val Lys Asn Ser Ser Pro
        915                920                925
Ala Pro Pro Gln Pro Ala Pro Gly Lys Val Glu Ser Gly Ala Gly Asp
        930                935                940
Ala Ile Gly Leu Ala Asp Ile Thr Gln Gln Leu Asn Gln Ser Glu Leu
945                950                955                960
Ala Val Leu Leu Asn Leu Leu Gln Ser Gln Thr Asp Leu Ser Ile Pro
        965                970                975
Gln Met Ala Gln Leu Leu Asn Ile His Ser Asn Pro Glu Met Gln Gln
        980                985                990
Gln Leu Glu Ala Leu Asn Gln Ser Ile Ser Ala Leu Thr Glu Ala Thr
        995                1000                1005
Ser Gln Gln Gln Asp Ser Glu Thr Met Ala Pro Glu Glu Ser Leu Lys
1010                1015                1020
Glu Ala Pro Ser Ala Pro Val Ile Leu Pro Ser Ala Glu Gln Thr Thr
1025                1030                1035                1040
Leu Glu Ala Ser Ser Thr Pro Ala Asp Met Gln Asn Ile Leu Ala Val
        1045                1050                1055
Leu Leu Ser Gln Leu Met Lys Thr Gln Glu Pro Ala Gly Ser Leu Glu
        1060                1065                1070
Glu Asn Asn Ser Asp Lys Asn Ser Gly Pro Gln Gly Pro Arg Arg Thr
        1075                1080                1085
Pro Thr Met Pro Gln Glu Glu Ala Ala Gly Arg Ser Asn Gly Gly Asn
1090                1095                1100
Ala Leu
11051106

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<210> 3622

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3622

```

Thr Pro Glu Arg Gly Ser Ala Tyr Pro Glu Thr Ala Ala Val Arg Arg
 1          5          10          15
Pro Ala Gly Glu Cys Pro Ile Thr Met Ser Asp Leu Glu Ala Lys Leu
          20          25          30
Ser Thr Glu His Leu Gly Asp Lys Ile Lys Asp Glu Asp Ile Lys Leu
          35          40          45
Arg Val Ile Gly Gln Asp Ser Ser Glu Ile His Phe Lys Val Lys Met
          50          55          60
Thr Thr Pro Leu Lys Lys Leu Lys Lys Ser Tyr Cys Gln Arg Gln Gly
 65          70          75          80
Val Pro Val Asn Ser Leu Arg Phe Leu Phe Glu Gly Gln Arg Ile Ala
          85          90          95
Asp Asn His Thr Pro Glu Glu Leu Gly Met Glu Glu Glu Asp Val Ile
          100          105          110
Glu Val Tyr Gln Glu Gln Ile Gly Gly His Ser Thr Val
          115          120          125

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<210> 3623

<211> 514

<212> PRT

<213> Homo sapiens

<400> 3623

```

Pro Pro Pro Ala Pro Gly Pro Asp Gly Leu Asn Glu Gly Cys Leu His
 1          5          10          15
Arg Leu Ser Met Pro His Gln Arg Pro Arg Thr Cys Ala Met Asn Pro
          20          25          30
Glu Leu Thr Met Glu Ser Leu Gly Thr Leu His Gly Ala Arg Gly Gly
          35          40          45
Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
 50          55          60
Pro Gly His Glu Gln Glu Leu Leu Ala Ser Pro Ser Pro His His Ala
 65          70          75          80
Arg Arg Gly Pro Arg Gly Ser Leu Arg Gly Pro Pro Pro Pro Pro Thr
          85          90          95
Ala His Gln Glu Leu Gly Thr Ala Ala Ala Ala Ala Ala Ala Ala Ser
          100          105          110
Arg Ser Ala Met Val Thr Ser Met Ala Ser Ile Leu Asp Gly Gly Asp
          115          120          125
Tyr Arg Pro Glu Leu Ser Ile Pro Leu His His Ala Met Ser Met Ser
 130          135          140
Cys Asp Ser Ser Pro Pro Gly Met Gly Met Ser Asn Thr Tyr Thr Thr
 145          150          155          160
Leu Thr Pro Leu Gln Pro Leu Pro Pro Ile Ser Thr Val Ser Asp Lys
          165          170          175
Phe His His Pro His Pro His His His Pro His His His His His His
          180          185          190
His His Gln Arg Leu Ser Gly Asn Val Ser Gly Ser Phe Thr Leu Met
          195          200          205
Arg Asp Glu Arg Gly Leu Pro Ala Met Asn Asn Leu Tyr Ser Pro Tyr
 210          215          220
Lys Glu Met Pro Gly Met Ser Gln Ser Leu Ser Pro Leu Ala Ala Thr
 225          230          235          240
Pro Leu Gly Asn Gly Leu Gly Gly Leu His Asn Ala Gln Gln Ser Leu
          245          250          255
Pro Asn Tyr Gly Pro Pro Gly His Asp Lys Met Leu Ser Pro Asn Phe

```

	260		265		270										
Asp	Ala	His	His	Thr	Ala	Met	Leu	Thr	Arg	Gly	Glu	Gln	His	Leu	Ser
	275						280					285			
Arg	Gly	Leu	Gly	Thr	Pro	Pro	Ala	Ala	Met	Met	Ser	His	Leu	Asn	Gly
	290						295					300			
Leu	His	His	Pro	Gly	His	Thr	Gln	Ser	His	Gly	Pro	Val	Leu	Ala	Pro
305					310					315					320
Ser	Arg	Glu	Arg	Pro	Pro	Ser	Ser	Ser	Ser	Gly	Ser	Gln	Val	Ala	Thr
				325					330					335	
Ser	Gly	Gln	Leu	Glu	Glu	Ile	Asn	Thr	Lys	Glu	Val	Ala	Gln	Arg	Ile
			340					345					350		
Thr	Ala	Glu	Leu	Lys	Arg	Tyr	Ser	Ile	Pro	Gln	Ala	Ile	Phe	Ala	Gln
	355						360					365			
Arg	Val	Leu	Cys	Arg	Ser	Gln	Gly	Thr	Leu	Ser	Asp	Leu	Leu	Arg	Asn
	370					375					380				
Pro	Lys	Pro	Trp	Ser	Lys	Leu	Lys	Ser	Gly	Arg	Glu	Thr	Phe	Arg	Arg
385					390					395					400
Met	Trp	Lys	Trp	Leu	Gln	Glu	Pro	Glu	Phe	Gln	Arg	Met	Ser	Ala	Leu
				405					410					415	
Arg	Leu	Ala	Ala	Cys	Lys	Arg	Lys	Glu	Gln	Glu	Pro	Asn	Lys	Asp	Arg
			420					425					430		
Asn	Asn	Ser	Gln	Lys	Lys	Ser	Arg	Leu	Val	Phe	Thr	Asp	Leu	Gln	Arg
	435						440					445			
Arg	Thr	Leu	Phe	Ala	Ile	Phe	Lys	Glu	Asn	Lys	Arg	Pro	Ser	Lys	Glu
	450					455					460				
Met	Gln	Ile	Thr	Ile	Ser	Gln	Gln	Leu	Gly	Leu	Glu	Leu	Thr	Thr	Val
465					470					475					480
Ser	Asn	Phe	Phe	Met	Asn	Ala	Arg	Arg	Arg	Ser	Leu	Glu	Lys	Trp	Gln
				485					490					495	
Asp	Asp	Leu	Ser	Thr	Gly	Gly	Ser	Ser	Ser	Thr	Ser	Ser	Thr	Cys	Thr
			500					505					510		
Lys	Ala														
	514														

<210> 3624
 <211> 708
 <212> PRT
 <213> Homo sapiens

<400> 3624

Ser	Ala	Arg	Lys	Ala	Glu	Ala	Ala	Thr	Ser	Gly	Thr	Ala	Ala	Arg	Asp
1				5					10					15	
Gly	Ser	Val	Gly	Arg	Asn	Leu	Val	Pro	Pro	Pro	Ser	Ala	Ser	Ala	Pro
			20					25					30		
Lys	Ala	Glu	Val	Glu	Ser	Asn	Glu	Lys	Asp	Asn	Arg	Pro	Glu	Glu	Glu
		35					40					45			
Glu	Gln	Val	Ile	His	Glu	Asp	Asp	Glu	Arg	Pro	Ser	Glu	Lys	Asn	Glu
	50					55					60				
Phe	Ser	Arg	Arg	Lys	Arg	Ser	Lys	Ser	Glu	Asp	Met	Asp	Asn	Val	Gln
65					70				75					80	
Ser	Lys	Arg	Arg	Arg	Tyr	Met	Glu	Glu	Glu	Tyr	Glu	Ala	Glu	Phe	Gln
				85					90					95	
Val	Lys	Ile	Thr	Ala	Lys	Gly	Asp	Ile	Asn	Gln	Lys	Leu	Gln	Lys	Val
		100					105					110			
Ile	Gln	Trp	Leu	Leu	Glu	Glu	Lys	Leu	Cys	Ala	Leu	Gln	Cys	Ala	Val
	115					120					125				
Phe	Asp	Lys	Thr	Leu	Ala	Glu	Leu	Lys	Thr	Arg	Val	Glu	Lys	Ile	Glu
	130					135				140					
Cys	Asn	Lys	Arg	His	Lys	Thr	Val	Leu	Thr	Glu	Leu	Gln	Ala	Lys	Ile
145					150					155					160
Ala	Arg	Leu	Thr	Lys	Arg	Phe	Glu	Ala	Ala	Lys	Glu	Asp	Leu	Lys	Lys

5397

675 680 685
 Lys Met Ala Ile Val Leu Val Met Glu Cys Pro Gly Gly Gly Ser Lys
 690 695 700
 Leu Cys His Cys
 705 708

<210> 3625
 <211> 301
 <212> PRT
 <213> Homo sapiens

<400> 3625
 Ala Ser Pro Phe Leu Arg Pro Gln Gly His Asp Ser Gly Glu Arg Glu
 1 5 10 15
 Pro Phe Ser Gln Thr Pro Gly Leu Met Gln Pro Phe Ser Ile Pro Val
 20 25 30
 Gln Ile Thr Leu Gln Gly Ser Arg Arg Gln Gly Arg Thr Ala Phe
 35 40 45
 Pro Ala Ser Gly Lys Lys Arg Glu Thr Asp Tyr Ser Asp Gly Asp Pro
 50 55 60
 Leu Asp Val His Lys Arg Leu Pro Ser Ser Thr Gly Glu Asp Arg Ala
 65 70 75 80
 Val Met Leu Gly Phe Ala Met Met Gly Phe Ser Val Leu Met Phe Phe
 85 90 95
 Leu Leu Gly Thr Thr Ile Leu Lys Pro Phe Met Leu Ser Ile Gln Arg
 100 105 110
 Glu Glu Ser Thr Cys Thr Ala Ile His Thr Asp Ile Met Asp Asp Trp
 115 120 125
 Leu Asp Cys Ala Phe Thr Cys Gly Val His Cys His Gly Gln Gly Lys
 130 135 140
 Tyr Pro Cys Leu Gln Val Phe Val Asn Leu Ser His Pro Gly Gln Lys
 145 150 155 160
 Ala Leu Leu His Tyr Asn Glu Glu Ala Val Gln Ile Asn Pro Lys Cys
 165 170 175
 Phe Tyr Thr Pro Lys Cys His Gln Asp Arg Asn Asp Leu Leu Asn Ser
 180 185 190
 Ala Leu Asp Ile Lys Glu Phe Phe Asp His Lys Asn Gly Thr Pro Phe
 195 200 205
 Ser Cys Phe Tyr Ser Pro Ala Ser Gln Ser Glu Asp Val Ile Leu Ile
 210 215 220
 Lys Lys Tyr Asp Gln Met Ala Ile Phe His Cys Leu Phe Trp Pro Ser
 225 230 235 240
 Leu Thr Leu Leu Gly Gly Ala Leu Ile Val Gly Met Val Arg Leu Thr
 245 250 255
 Gln His Leu Ser Leu Leu Cys Glu Lys Tyr Ser Thr Val Val Arg Asp
 260 265 270
 Glu Val Gly Gly Lys Val Pro Tyr Ile Glu Gln His Gln Phe Lys Leu
 275 280 285
 Cys Ile Met Arg Arg Ser Lys Gly Arg Ala Glu Lys Ser
 290 295 300 301

<210> 3626
 <211> 303
 <212> PRT
 <213> Homo sapiens

<400> 3626
 Ser Ser Val Val Glu Phe Ser Ala Leu Ser Val Ser Met Ala Cys Leu

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      1           5           10           15
Ser Pro Ser Gln Leu Gln Lys Phe Gln Gln Asp Gly Phe Leu Val Leu
      20           25           30
Glu Gly Phe Leu Ser Ala Glu Glu Cys Val Ala Met Gln Gln Arg Ile
      35           40           45
Gly Glu Ile Val Ala Glu Met Asp Val Pro Leu His Cys Arg Thr Glu
      50           55           60
Phe Ser Thr Gln Glu Glu Glu Gln Leu Arg Ala Gln Gly Ser Thr Asp
      65           70           75           80
Tyr Phe Leu Ser Ser Gly Asp Lys Ile Arg Phe Phe Phe Glu Lys Gly
      85           90           95
Val Phe Asp Glu Lys Gly Asn Phe Leu Val Pro Pro Glu Lys Ser Ile
      100          105          110
Asn Lys Ile Gly His Ala Leu His Ala His Asp Pro Val Phe Lys Ser
      115          120          125
Ile Thr His Ser Phe Lys Val Gln Thr Leu Ala Arg Ser Leu Gly Leu
      130          135          140
Gln Met Pro Val Val Val Gln Ser Met Tyr Ile Phe Lys Gln Pro His
      145          150          155          160
Phe Gly Gly Glu Val Ser Pro His Gln Asp Ala Ser Phe Leu Tyr Thr
      165          170          175
Glu Pro Leu Gly Arg Val Leu Gly Val Trp Ile Ala Val Glu Asp Ala
      180          185          190
Thr Leu Glu Asn Gly Cys Leu Trp Phe Ile Pro Gly Ser His Thr Ser
      195          200          205
Gly Val Ser Arg Arg Met Val Arg Ala Pro Val Gly Ser Ala Pro Gly
      210          215          220
Thr Ser Phe Leu Gly Ser Glu Pro Ala Arg Asp Asn Ser Leu Phe Val
      225          230          235          240
Pro Thr Pro Val Gln Arg Gly Ala Leu Val Leu Ile His Gly Glu Val
      245          250          255
Val His Lys Ser Lys Gln Asn Leu Ser Asp Arg Ser Arg Gln Ala Tyr
      260          265          270
Thr Phe His Leu Met Glu Ala Ser Gly Thr Thr Trp Ser Pro Glu Asn
      275          280          285
Trp Leu Gln Pro Thr Ala Glu Leu Pro Phe Pro Gln Leu Tyr Thr
      290          295          300          303

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<210> 3627

<211> 137

<212> PRT

<213> Homo sapiens

<400> 3627

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Ile Asn Ser Ser Pro Arg Thr Gly Arg Asp His Gln Glu Leu Asn Leu
      1           5           10           15
His Thr Glu Arg Asp Ser Arg Ser Gln Arg Ala Val Leu Lys Ile Pro
      20           25           30
Arg Gln Asn Pro Gly Ile Phe Tyr Trp Ile Phe Leu Pro Ser Arg Ser
      35           40           45
His Ser Ala Ser His Gly Ser Arg Gln Arg Gln Val Ser Cys Gln Gly
      50           55           60
Thr Gln Asp Glu Ile Leu Lys Met Arg Asn Thr Phe Ala Glu Leu Lys
      65           70           75           80
Asn Ser Leu Glu Ala Leu Ser Ser Arg Met Asp Gln Ala Glu Glu Arg
      85           90           95
Ile Gly Thr Gln Ala Gly Val Gln Trp Arg Asp His Gly Ser Leu Gln
      100          105          110
Pro Gln Pro Pro Glu Phe Lys Gln Cys Phe His Leu Ser Leu Pro Ser
      115          120          125
Ser Trp Asp Tyr Arg Ala Cys Leu Ser

```

130

135

137

<210> 3628

<211> 269

<212> PRT

<213> Homo sapiens

<400> 3628

Gly Cys Lys His Leu Leu Gln Asn Ser Trp Tyr Asp Pro Arg Val Arg
 1 5 10 15
 Glu Ala Asp Arg Val Gly Gln Arg Ala Arg Arg Pro Arg Ala Ala Met
 20 25 30
 Asp Trp Leu Met Gly Lys Ser Lys Ala Lys Pro Asn Gly Lys Lys Pro
 35 40 45
 Ala Ala Glu Glu Arg Lys Ala Tyr Leu Glu Pro Glu His Thr Lys Ala
 50 55 60
 Arg Ile Thr Asp Phe Gln Phe Lys Glu Leu Val Val Leu Pro Arg Glu
 65 70 75 80
 Ile Asp Leu Asn Glu Trp Leu Ala Ser Asn Thr Thr Thr Phe Phe His
 85 90 95
 His Ile Asn Leu Gln Tyr Ser Thr Ile Ser Glu Phe Cys Thr Gly Glu
 100 105 110
 Thr Cys Gln Thr Met Ala Val Cys Asn Thr Gln Tyr Tyr Trp Tyr Asp
 115 120 125
 Glu Arg Gly Lys Lys Val Lys Cys Thr Ala Pro Gln Tyr Val Asp Phe
 130 135 140
 Val Met Ser Ser Val Gln Lys Leu Val Thr Asp Glu Asp Val Phe Pro
 145 150 155 160
 Thr Lys Tyr Gly Arg Glu Phe Pro Ser Ser Phe Glu Ser Leu Val Arg
 165 170 175
 Lys Ile Cys Arg His Leu Phe His Val Leu Ala His Ile Tyr Trp Ala
 180 185 190
 His Phe Lys Glu Thr Leu Ala Leu Glu Leu His Gly His Leu Asn Thr
 195 200 205
 Leu Tyr Val His Phe Ile Leu Phe Ala Arg Glu Phe Asn Leu Leu Asp
 210 215 220
 Pro Lys Glu Thr Ala Ile Met Asp Asp Leu Thr Glu Val Leu Cys Ser
 225 230 235 240
 Gly Gly Arg Arg Gly Ser Thr Val Gly Ala Val Gly Met Gly Pro Ala
 245 250 255
 Ala Gly Ala Pro Gly Ala Gln Asn His Val Lys Glu Arg
 260 265 269

<210> 3629

<211> 301

<212> PRT

<213> Homo sapiens

<400> 3629

Cys Ser His Gly Ser Ser Ala Val Ser Ala Trp Ser Pro Leu Phe Gln
 1 5 10 15
 Ala Ser Glu Val Glu Arg Gln Leu Ser Met Gln Val His Ala Leu Arg
 20 25 30
 Glu Asp Phe Arg Glu Lys Asn Ser Ser Thr Asn Gln His Ile Ile Arg
 35 40 45
 Leu Glu Ser Leu Gln Ala Glu Ile Lys Met Leu Ser Asp Arg Lys Arg
 50 55 60
 Glu Leu Glu His Arg Leu Ser Ala Thr Leu Glu Glu Asn Asp Leu Leu

65		70		75		80
Gln Gly Thr Val	Glu Glu Leu Gln Asp Arg Val Leu Ile Leu Glu Arg					
	85		90		95	
Gln Gly His Asp Lys Asp Leu Gln Leu His Gln Ser Gln Leu Glu Leu						
	100		105		110	
Gln Glu Val Arg Leu Ser Cys Arg Gln Leu Gln Val Lys Val Glu Glu						
	115		120		125	
Leu Thr Glu Glu Arg Ser Leu Gln Ser Ser Ala Ala Thr Ser Thr Ser						
	130		135		140	
Leu Leu Ser Glu Ile Glu Gln Ser Met Glu Ala Glu Glu Leu Glu Gln						
	145		150		155	
Glu Arg Glu Gln Leu Thr Leu Leu Ser Val Glu Met Thr Ala Leu Lys						
	165		170		175	
Glu Glu Arg Asp Arg Leu Arg Val Thr Ser Glu Asp Lys Glu Pro Lys						
	180		185		190	
Glu Gln Leu Gln Lys Ala Ile Arg Asp Arg Asp Glu Ala Ile Ala Lys						
	195		200		205	
Lys Asn Ala Val Glu Leu Glu Leu Ala Lys Cys Arg Met Asp Met Met						
	210		215		220	
Ser Leu Asn Ser Gln Leu Leu Asp Ala Ile Gln Gln Lys Leu Asn Leu						
	225		230		235	
Ser Gln Gln Leu Glu Ala Trp Gln Asp Asp Met His Arg Val Ile Asp						
	245		250		255	
Arg Gln Leu Met Asp Thr His Leu Lys Glu Arg Ser Gln Pro Ala Ala						
	260		265		270	
Ala Leu Cys Arg Gly His Ser Ala Gly Arg Gly Asp Glu Pro Ser Ile						
	275		280		285	
Ala Glu Gly Lys Arg Leu Phe Ser Phe Phe Arg Lys Ile						
	290		295		300 301	

<210> 3630

<211> 141

<212> PRT

<213> Homo sapiens

<400> 3630

Pro Ala Lys Val	Leu Thr Leu Asp Ile Tyr Leu Ser Lys Thr Glu Gly
1	5 10 15
Ala Gln Val Asp Glu Pro Val Val Ile Thr Pro Arg Ala Glu Asp Cys	
	20 25 30
Gly Asp Trp Asp Asp Met Glu Lys Arg Ser Ser Gly Arg Arg Ser Gly	
	35 40 45
Arg Arg Arg Gly Ser Gln Lys Ser Thr Asp Ser Pro Gly Ala Asp Ala	
	50 55 60
Glu Leu Pro Glu Ser Ala Ala Arg Asp Asp Ala Val Phe Asp Asp Glu	
	65 70 75 80
Val Ala Pro Asn Ala Ala Ser Asp Asn Ala Ser Ala Glu Lys Lys Val	
	85 90 95
Lys Ser Pro Arg Ala Ala Leu Asp Gly Gly Val Ala Ser Ala Ala Ser	
	100 105 110
Pro Glu Ser Lys Pro Ser Pro Gly Thr Lys Gly Gln Leu Arg Gly Glu	
	115 120 125
Ser Asp Arg Ser Lys Gln Pro Pro Ala Ser Ser Pro	
	130 135 140 141

<210> 3631

<211> 469

<212> PRT

<213> Homo sapiens

<400> 3631

Trp	Ser	Gly	Phe	Trp	Gln	Leu	Pro	Gly	Val	Arg	Gly	Val	Gly	Ser	Ala
1				5					10					15	
Pro	Gly	Gly	Asp	Gly	Ala	Glu	Phe	Thr	Ser	Arg	Arg	Gly	Ser	Ser	Arg
			20					25					30		
Arg	Pro	Gly	Ala	Ala	Cys	Pro	Gly	Cys	Arg	Gly	Ala	Gly	Ser	Glu	Arg
			35				40					45			
Ala	Pro	Gly	Gly	Met	Gly	Arg	Arg	Arg	Ala	Pro	Glu	Leu	Tyr	Arg	Ala
			50			55					60				
Pro	Phe	Pro	Leu	Tyr	Ala	Leu	Gln	Val	Asp	Pro	Ser	Thr	Gly	Leu	Leu
			65		70				75					80	
Ile	Ala	Ala	Gly	Gly	Gly	Gly	Ala	Ala	Lys	Thr	Gly	Ile	Lys	Asn	Gly
			85					90					95		
Val	His	Phe	Leu	Gln	Leu	Glu	Leu	Ile	Asn	Gly	Arg	Leu	Ser	Ala	Ser
			100					105					110		
Leu	Leu	His	Ser	His	Asp	Thr	Glu	Thr	Arg	Ala	Thr	Met	Asn	Leu	Ala
		115				120						125			
Leu	Ala	Gly	Asp	Ile	Leu	Ala	Ala	Gly	Gln	Asp	Ala	His	Cys	Gln	Leu
		130				135					140				
Leu	Arg	Phe	Gln	Ala	His	Gln	Gln	Gln	Gly	Asn	Lys	Ala	Glu	Lys	Ala
				150						155				160	
Gly	Ser	Lys	Glu	Gln	Gly	Pro	Arg	Gln	Arg	Lys	Gly	Ala	Ala	Pro	Ala
			165					170					175		
Glu	Lys	Lys	Cys	Gly	Ala	Glu	Thr	Gln	His	Glu	Gly	Leu	Glu	Leu	Arg
			180					185					190		
Val	Glu	Asn	Leu	Gln	Ala	Val	Gln	Thr	Asp	Phe	Ser	Ser	Asp	Pro	Leu
		195					200					205			
Gln	Lys	Val	Val	Cys	Phe	Asn	His	Asp	Asn	Thr	Leu	Leu	Ala	Thr	Gly
		210				215					220				
Gly	Thr	Asp	Gly	Tyr	Val	Arg	Val	Trp	Lys	Val	Pro	Ser	Leu	Glu	Lys
				230					235					240	
Val	Leu	Glu	Phe	Lys	Ala	His	Glu	Gly	Glu	Ile	Glu	Asp	Leu	Ala	Leu
				245					250					255	
Gly	Pro	Asp	Gly	Lys	Leu	Val	Thr	Val	Gly	Arg	Asp	Leu	Lys	Ala	Ser
			260					265					270		
Val	Trp	Gln	Lys	Asp	Gln	Leu	Val	Thr	Gln	Leu	His	Trp	Gln	Glu	Asn
		275				280						285			
Gly	Pro	Thr	Phe	Ser	Ser	Thr	Pro	Tyr	Arg	Tyr	Gln	Ala	Cys	Arg	Phe
		290				295					300				
Gly	Gln	Val	Pro	Asp	Gln	Pro	Ala	Gly	Leu	Arg	Leu	Phe	Thr	Val	Gln
					310				315					320	
Ile	Pro	His	Lys	Arg	Leu	Arg	Gln	Pro	Pro	Pro	Cys	Tyr	Leu	Thr	Ala
				325					330					335	
Trp	Asp	Gly	Ser	Asn	Phe	Leu	Pro	Leu	Arg	Thr	Lys	Ser	Cys	Gly	His
			340					345					350		
Glu	Val	Val	Ser	Cys	Leu	Asp	Val	Ser	Glu	Ser	Gly	Thr	Phe	Leu	Gly
		355					360					365			
Leu	Gly	Thr	Val	Thr	Gly	Ser	Val	Ala	Ile	Tyr	Ile	Ala	Phe	Ser	Leu
		370				375					380				
Gln	Cys	Leu	Tyr	Tyr	Val	Arg	Glu	Ala	His	Gly	Ile	Val	Val	Thr	Asp
					390					395				400	
Val	Ala	Phe	Leu	Pro	Glu	Lys	Gly	Arg	Gly	Pro	Glu	Leu	Leu	Gly	Ser
				405					410					415	
His	Glu	Thr	Ala	Leu	Phe	Ser	Val	Ala	Val	Asp	Ser	Arg	Cys	Gln	Leu
			420					425					430		
His	Leu	Leu	Pro	Ser	Arg	Arg	Ser	Val	Pro	Val	Trp	Leu	Leu	Leu	Leu
		435					440					445			
Leu	Cys	Val	Gly	Leu	Ile	Ile	Val	Thr	Ile	Leu	Leu	Leu	Gln	Ser	Ala
		450				455					460				
Phe	Pro	Gly	Phe	Leu											
465				469											

<210> 3632
 <211> 301
 <212> PRT
 <213> Homo sapiens

<400> 3632
 Pro Trp Cys Gln Arg Val Glu Val Arg Ser Cys Gly Ser Ser Lys Arg
 1 5 10 15
 Ser Cys Ser Arg Trp Ser Gly Ser Ser Trp Asp Gly Ser Arg Ser Leu
 20 25 30
 Gly Arg Gly Leu Asn His Thr Ser Leu Asn Arg Ser Pro Pro Phe Thr
 35 40 45
 Pro Asp Thr Met Thr His Cys Cys Ser Pro Cys Cys Gln Pro Thr Cys
 50 55 60
 Cys Arg Thr Thr Cys Cys Arg Thr Thr Cys Trp Lys Pro Thr Thr Val
 65 70 75 80
 Thr Thr Cys Ser Ser Thr Pro Cys Cys Gln Pro Ser Cys Cys Val Pro
 85 90 95
 Ser Cys Cys Gln Pro Cys Cys His Pro Thr Cys Cys Gln Asn Thr Cys
 100 105 110
 Cys Arg Thr Thr Cys Cys Gln Pro Thr Cys Val Ala Ser Cys Cys Gln
 115 120 125
 Pro Ser Cys Cys Ser Thr Pro Cys Cys Gln Pro Thr Cys Cys Gly Ser
 130 135 140
 Ser Cys Cys Gly Gln Thr Ser Cys Gly Ser Ser Cys Cys Gln Pro Ile
 145 150 155 160
 Cys Gly Ser Ser Cys Cys Gln Pro Cys Cys His Pro Thr Cys Tyr Gln
 165 170 175
 Thr Ile Cys Phe Arg Thr Thr Cys Cys Gln Pro Thr Cys Cys Gln Pro
 180 185 190
 Thr Cys Cys Arg Asn Thr Ser Cys Gln Pro Thr Cys Cys Gly Ser Ser
 195 200 205
 Cys Cys Gln Pro Cys Cys His Pro Thr Cys Cys Gln Thr Ile Cys Arg
 210 215 220
 Ser Thr Cys Cys Gln Pro Ser Cys Val Thr Arg Cys Cys Ser Thr Pro
 225 230 235 240
 Cys Cys Gln Pro Thr Cys Gly Gly Ser Ser Cys Cys Ser Gln Thr Cys
 245 250 255
 Asn Glu Ser Ser Tyr Cys Leu Pro Cys Cys Arg Pro Thr Cys Cys Gln
 260 265 270
 Thr Thr Cys Tyr Arg Thr Thr Cys Cys Arg Pro Ser Cys Cys Cys Ser
 275 280 285
 Pro Cys Cys Val Ser Ser Cys Cys Gln Pro Ser Cys Cys
 290 295 300 301

<210> 3633
 <211> 799
 <212> PRT
 <213> Homo sapiens

<400> 3633
 Gly Pro Glu Gly Tyr Arg Gly Arg Arg Ala Arg His Pro Ser Leu Gly
 1 5 10 15
 Ser Thr Thr Gly His Cys Gly Gly Gly Arg Gly Ala Glu Gly Thr Gly
 20 25 30
 Thr Asp Pro Ala Ala Pro Ala Ala Arg Leu Asn Val Asp Gly Leu Leu
 35 40 45
 Val Tyr Phe Pro Tyr Asp Tyr Ile Tyr Pro Glu Gln Phe Ser Tyr Met

50	55	60
Arg Glu Leu Lys	Arg Thr Leu Asp Ala Lys Gly His Gly Val Leu Glu	
65	70	75
Met Pro Ser Gly	Thr Gly Lys Thr Val Ser Leu Leu Ala Leu Ile Met	80
	85	90
Ala Tyr Gln Arg	Ala Tyr Pro Leu Glu Val Thr Lys Leu Ile Tyr Cys	95
	100	105
Ser Arg Thr Val	Pro Glu Ile Glu Lys Val Ile Glu Glu Leu Arg Lys	110
	115	120
Leu Leu Asn Phe	Tyr Glu Lys Gln Glu Gly Glu Lys Leu Pro Phe Leu	125
	130	135
Gly Leu Ala Leu	Ser Ser Arg Lys Asn Leu Cys Ile His Pro Glu Val	140
145	150	155
Thr Pro Leu Arg	Phe Gly Lys Asp Val Asp Gly Lys Cys His Ser Leu	160
	165	170
Thr Ala Ser Tyr	Val Arg Ala Gln Tyr Gln His Asp Thr Ser Leu Pro	175
	180	185
His Cys Arg Phe	Tyr Glu Glu Phe Asp Ala His Gly Arg Glu Val Pro	190
	195	200
Leu Pro Ala Gly	Ile Tyr Asn Leu Asp Asp Leu Lys Ala Leu Gly Arg	205
	210	215
Arg Gln Gly Trp	Cys Pro Tyr Phe Leu Ala Arg Tyr Ser Ile Leu His	220
225	230	235
Ala Asn Val Val	Val Tyr Ser Tyr His Tyr Leu Leu Asp Pro Lys Ile	240
	245	250
Ala Asp Leu Val	Ser Lys Glu Leu Ala Arg Lys Ala Val Val Val Phe	255
	260	265
Asp Glu Ala His	Asn Ile Asp Asn Val Cys Ile Asp Ser Met Ser Val	270
	275	280
Asn Leu Thr Arg	Arg Thr Leu Asp Arg Cys Gln Gly Asn Leu Glu Thr	285
	290	295
Leu Gln Lys Thr	Val Leu Arg Ile Lys Glu Thr Asp Glu Gln Arg Leu	300
305	310	315
Arg Asp Glu Tyr	Arg Arg Leu Val Glu Gly Leu Arg Glu Ala Ser Ala	320
	325	330
Ala Arg Glu Thr	Asp Ala His Leu Ala Asn Pro Val Leu Pro Asp Glu	335
	340	345
Val Leu Gln Glu	Ala Val Pro Gly Ser Ile Arg Thr Ala Glu His Phe	350
	355	360
Leu Gly Phe Leu	Arg Arg Leu Leu Glu Tyr Val Lys Trp Arg Leu Arg	365
	370	375
Val Gln His Val	Val Gln Glu Ser Pro Pro Ala Phe Leu Ser Gly Leu	380
385	390	395
Ala Gln Arg Val	Cys Ile Gln Arg Lys Pro Leu Arg Phe Cys Ala Glu	400
	405	410
Arg Leu Arg Ser	Leu Leu His Thr Leu Glu Ile Thr Asp Leu Ala Asp	415
	420	425
Phe Ser Pro Leu	Thr Leu Leu Ala Asn Phe Ala Thr Leu Val Ser Thr	430
	435	440
Tyr Ala Lys Gly	Phe Thr Ile Ile Ile Glu Pro Phe Asp Asp Arg Thr	445
	450	455
Pro Thr Ile Ala	Asn Pro Ile Leu His Phe Ser Cys Met Asp Ala Ser	460
465	470	475
Leu Ala Ile Lys	Pro Val Phe Glu Arg Phe Gln Ser Val Ile Ile Thr	480
	485	490
Ser Gly Thr Leu	Ser Pro Leu Asp Ile Tyr Pro Lys Ile Leu Asp Phe	495
	500	505
His Pro Val Thr	Met Ala Thr Phe Thr Met Thr Leu Ala Arg Val Cys	510
	515	520
Leu Cys Pro Met	Ile Ile Gly Arg Gly Asn Asp Gln Val Ala Ile Ser	525
	530	535
Ser Lys Phe Glu	Thr Arg Glu Asp Ile Ala Val Ile Arg Asn Tyr Gly	540
545	550	555
Asn Leu Leu Leu	Glu Met Ser Ala Val Val Pro Asp Gly Ile Val Ala	560

										565										570										575				
Phe	Phe	Thr	Ser	Tyr	Gln	Tyr	Met	Glu	Ser	Thr	Val	Ala	Ser	Trp	Tyr																			
															580					585					590									
Glu	Gln	Gly	Ile	Leu	Glu	Asn	Ile	Gln	Arg	Asn	Lys	Leu	Leu	Phe	Ile																			
															595					600					605									
Glu	Thr	Gln	Asp	Gly	Ala	Glu	Thr	Ser	Val	Ala	Leu	Glu	Lys	Tyr	Gln																			
															610					615					620									
Glu	Ala	Cys	Glu	Asn	Gly	Arg	Gly	Ala	Ile	Leu	Leu	Ser	Val	Ala	Arg																			
															625					630					635									
Gly	Lys	Val	Ser	Glu	Gly	Ile	Asp	Phe	Val	His	His	Tyr	Gly	Arg	Ala																			
															645					650					655									
Val	Ile	Met	Phe	Gly	Val	Pro	Tyr	Val	Tyr	Thr	Gln	Ser	Arg	Ile	Leu																			
															660					665					670									
Lys	Ala	Arg	Leu	Glu	Tyr	Leu	Arg	Asp	Gln	Phe	Gln	Ile	Arg	Glu	Asn																			
															675					680					685									
Asp	Phe	Leu	Thr	Phe	Asp	Ala	Met	Arg	His	Ala	Ala	Gln	Cys	Val	Gly																			
															690					695					700									
Arg	Ala	Ile	Arg	Gly	Lys	Thr	Asp	Tyr	Gly	Leu	Met	Val	Phe	Ala	Asp																			
															705					710					715									
Lys	Arg	Phe	Ala	Arg	Gly	Asp	Lys	Arg	Gly	Lys	Leu	Pro	Arg	Trp	Ile																			
															725					730					735									
Gln	Glu	His	Leu	Thr	Asp	Ala	Asn	Leu	Asn	Leu	Thr	Val	Asp	Glu	Gly																			
															740					745					750									
Val	Gln	Val	Ala	Lys	Tyr	Phe	Leu	Arg	Gln	Met	Ala	Gln	Pro	Phe	His																			
															755					760					765									
Arg	Glu	Asp	Gln	Leu	Gly	Leu	Ser	Leu	Leu	Ser	Leu	Glu	Gln	Leu	Glu																			
															770					775					780									
Ser	Glu	Glu	Thr	Leu	Lys	Arg	Ile	Glu	Gln	Ile	Ala	Gln	Gln	Leu																				
															785					790					795									
																									799									

<210> 3634
 <211> 74
 <212> PRT
 <213> Homo sapiens

<400> 3634

Leu	Lys	Met	Ser	Ser	Lys	Thr	Ala	Ser	Thr	Asn	Asn	Ile	Ala	Gln	Ala
1				5					10					15	
Arg	Arg	Thr	Val	Gln	Gln	Leu	Arg	Leu	Glu	Ala	Ser	Ile	Glu	Arg	Ile
		20						25					30		
Lys	Val	Ser	Lys	Ala	Ser	Ala	Asp	Leu	Met	Ser	Tyr	Cys	Glu	Glu	His
		35					40					45			
Ala	Arg	Ser	Asp	Pro	Leu	Leu	Ile	Gly	Ile	Pro	Thr	Ser	Glu	Asn	Pro
		50				55					60				
Phe	Lys	Asp	Lys	Lys	Thr	Cys	Ile	Ile	Leu						
65					70				74						

<210> 3635
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 3635

Thr	Glu	Leu	Ser	Gln	Leu	Glu	Lys	Ala	His	Pro	Pro	Ala	Asp	Met	Gly
1				5					10					15	
Arg	Arg	Lys	Ser	Lys	Arg	Lys	Pro	Pro	Lys	Lys	Lys	Met	Thr	Gly	
		20					25					30			
Thr	Leu	Glu	Thr	Gln	Phe	Thr	Cys	Pro	Phe	Cys	Asn	His	Glu	Lys	Ser

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<210> 3636
<211> 77
<212> PRT
<213> Homo sapiens
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<210> 3637
<211> 416
<212> PRT
<213> Homo sapiens
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5406

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165      170      175
Tyr Leu Leu Asn Thr Ile Ala Asp Ile Leu Gln Glu Glu Arg Lys Gln
180      185      190
Glu Lys Gln Asn Gly Arg Leu Pro Asn Gly Asn Ile Asp Asn Glu Asn
195      200      205
Asn Asn Ser Thr Pro Asp Pro Thr Trp Val His Glu Ile Phe Gln Gly
210      215      220
Thr Leu Thr Asn Glu Thr Arg Cys Leu Thr Cys Glu Thr Ile Ser Ser
225      230      235      240
Lys Asp Glu Asp Phe Leu Asp Leu Ser Val Asp Val Glu Gln Asn Thr
245      250      255
Ser Ile Thr His Cys Leu Arg Gly Phe Ser Asn Thr Glu Thr Leu Cys
260      265      270
Ser Glu Tyr Lys Tyr Tyr Cys Glu Glu Cys Arg Ser Lys Gln Glu Ala
275      280      285
His Lys Arg Met Lys Val Lys Lys Leu Pro Met Ile Leu Ala Leu His
290      295      300
Leu Lys Arg Phe Lys Tyr Met Asp Gln Leu His Arg Tyr Thr Lys Leu
305      310      315      320
Ser Tyr Arg Val Val Phe Pro Leu Glu Leu Arg Leu Phe Asn Thr Ser
325      330      335
Gly Asp Ala Thr Asn Pro Asp Arg Met Tyr Asp Leu Val Ala Val Val
340      345      350
Val His Cys Gly Ser Gly Pro Asn Arg Gly His Tyr Ile Ala Ile Val
355      360      365
Lys Ser His Asp Phe Trp Leu Leu Phe Asp Asp Asp Ile Val Glu Lys
370      375      380
Ile Asp Ala Gln Ala Ile Glu Glu Phe Tyr Gly Leu Thr Ser Asp Ile
385      390      395      400
Ser Lys Asn Ser Glu Ser Gly Tyr Ile Leu Phe Tyr Gln Ser Arg Asp
405      410      415      416

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<210> 3638
 <211> 206
 <212> PRT
 <213> Homo sapiens

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<400> 3638
Pro Ala Gly Ile Pro Val Ser Thr Ile Ser Ser Asp Arg Arg Ala Ser
1      5      10      15
Thr Asp Leu Thr Arg Lys Met Lys Pro Asp Glu Thr Pro Met Phe Asp
20      25      30
Pro Asn Leu Leu Lys Glu Val Asp Trp Ser Gln Asn Thr Ala Thr Phe
35      40      45
Ser Pro Ala Ile Ser Pro Thr His Pro Gly Glu Gly Leu Val Leu Arg
50      55      60
Pro Leu Cys Thr Ala Asp Leu Asn Arg Gly Phe Phe Lys Val Leu Gly
65      70      75      80
Gln Leu Thr Glu Thr Gly Val Val Ser Pro Glu Gln Phe Met Lys Ser
85      90      95
Phe Glu His Met Lys Lys Ser Gly Asp Tyr Tyr Val Thr Val Val Glu
100      105      110
Asp Val Thr Leu Gly Gln Ile Val Ala Thr Ala Thr Leu Ile Ile Glu
115      120      125
His Lys Phe Ile His Ser Cys Ala Lys Arg Gly Arg Val Glu Asp Val
130      135      140
Val Val Ser Asp Glu Cys Arg Gly Lys Gln Leu Gly Asn Leu Leu Leu
145      150      155      160
Ser Thr Leu Thr Leu Leu Ser Lys Lys Leu Asn Cys Tyr Lys Ile Thr

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				165					170					175			
Leu	Glu	Cys	Leu	Pro	Gln	Asn	Val	Gly	Phe	Tyr	Lys	Lys	Phe	Gly	Tyr		
			180					185					190				
Thr	Val	Ser	Glu	Glu	Asn	Tyr	Met	Cys	Arg	Arg	Phe	Leu	Lys				
		195					200					205	206				

<210> 3639

<211> 399

<212> PRT

<213> Homo sapiens

<400> 3639

Pro	Arg	Val	Arg	Leu	Leu	Arg	Pro	Ser	Arg	Ser	Arg	Ser	Cys	Arg	Gly		
1				5				10					15				
Leu	Leu	Ser	Thr	Arg	Ala	Pro	Gly	Pro	Ser	Pro	Phe	Arg	Ser	Leu	His		
		20					25						30				
Ser	Ser	Pro	Leu	Leu	Pro	His	Ala	Met	Lys	Ser	Pro	Phe	Tyr	Arg	Cys		
		35					40						45				
Gln	Asn	Thr	Thr	Ser	Val	Glu	Lys	Gly	Asn	Ser	Ala	Val	Met	Gly	Gly		
	50					55					60						
Val	Leu	Phe	Ser	Thr	Gly	Leu	Leu	Gly	Asn	Leu	Leu	Ala	Leu	Gly	Leu		
	65				70					75				80			
Leu	Ala	Arg	Ser	Gly	Leu	Gly	Trp	Cys	Ser	Arg	Arg	Pro	Leu	Arg	Pro		
				85				90						95			
Leu	Pro	Ser	Val	Phe	Tyr	Met	Leu	Val	Cys	Gly	Leu	Thr	Val	Thr	Asp		
			100					105					110				
Leu	Leu	Gly	Lys	Cys	Leu	Leu	Ser	Pro	Val	Val	Leu	Ala	Ala	Tyr	Ala		
		115					120					125					
Gln	Asn	Arg	Ser	Leu	Arg	Val	Leu	Ala	Pro	Ala	Leu	Asp	Asn	Ser	Leu		
	130					135					140						
Cys	Gln	Ala	Phe	Ala	Phe	Met	Ser	Phe	Phe	Gly	Leu	Ser	Ser	Thr			
	145				150				155					160			
Leu	Gln	Leu	Leu	Ala	Met	Ala	Leu	Glu	Cys	Trp	Leu	Ser	Leu	Gly	His		
				165				170						175			
Pro	Phe	Phe	Tyr	Arg	Arg	His	Ile	Thr	Leu	Arg	Leu	Gly	Ala	Leu	Val		
			180					185					190				
Ala	Pro	Val	Val	Ser	Ala	Phe	Ser	Leu	Ala	Phe	Cys	Ala	Leu	Pro	Phe		
		195					200					205					
Met	Gly	Phe	Gly	Lys	Phe	Val	Gln	Tyr	Cys	Pro	Gly	Thr	Trp	Cys	Phe		
	210					215					220						
Ile	Gln	Met	Val	His	Glu	Glu	Gly	Ser	Leu	Ser	Val	Leu	Gly	Tyr	Ser		
	225				230					235				240			
Val	Leu	Tyr	Ser	Ser	Leu	Met	Ala	Leu	Leu	Val	Leu	Ala	Thr	Val	Leu		
				245				250						255			
Cys	Asn	Leu	Gly	Ala	Met	Arg	Asn	Leu	Tyr	Ala	Met	His	Arg	Arg	Leu		
		260						265					270				
Gln	Arg	His	Pro	Arg	Ser	Cys	Thr	Arg	Asp	Cys	Ala	Glu	Pro	Arg	Ala		
		275					280					285					
Asp	Gly	Arg	Glu	Ala	Ser	Pro	Gln	Pro	Leu	Glu	Glu	Leu	Asp	His	Leu		
	290					295					300						
Leu	Leu	Leu	Ala	Leu	Met	Thr	Val	Leu	Phe	Thr	Met	Cys	Ser	Leu	Pro		
	305				310					315				320			
Val	Ile	Tyr	Arg	Ala	Tyr	Tyr	Gly	Ala	Phe	Lys	Asp	Val	Lys	Glu	Lys		
				325				330						335			
Asn	Arg	Thr	Ser	Glu	Glu	Ala	Glu	Asp	Leu	Arg	Ala	Leu	Arg	Phe	Leu		
		340					345						350				
Ser	Val	Ile	Ser	Ile	Val	Asp	Pro	Trp	Ile	Phe	Ile	Ile	Phe	Arg	Ser		
		355					360					365					
Pro	Val	Phe	Arg	Ile	Phe	Phe	His	Lys	Ile	Phe	Ile	Arg	Pro	Leu	Arg		
	370					375					380						
Tyr	Arg	Ser	Arg	Cys	Ser	Asn	Ser	Thr	Asn	Met	Glu	Ser	Ser	Leu			

385

390

395

399

<210> 3640
 <211> 249
 <212> PRT
 <213> Homo sapiens

<400> 3640
 Pro Leu Pro Pro 5 Thr Leu Ala Met Phe Leu Thr Arg Ser Glu Tyr
 1 10 15
 Asp Arg Gly Val Asn Thr Phe Ser Pro Glu Gly Arg Leu Phe Gln Val
 20 25 30
 Glu Tyr Ala Ile Glu Ala Ile Lys Leu Gly Ser Thr Ala Ile Gly Ile
 35 40 45
 Gln Thr Ser Glu Gly Val Cys Leu Ala Val Glu Lys Arg Ile Thr Ser
 50 55 60
 Pro Leu Met Glu Pro Ser Ser Ile Glu Lys Ile Val Glu Ile Asp Ala
 65 70 75 80
 His Ile Gly Cys Ala Met Ser Gly Leu Ile Ala Asp Ala Lys Thr Leu
 85 90 95
 Ile Asp Lys Ala Arg Val Glu Thr Gln Asn His Trp Phe Thr Tyr Asn
 100 105 110
 Glu Thr Met Thr Val Glu Ser Val Thr Gln Ala Val Ser Asn Leu Ala
 115 120 125
 Leu Gln Phe Gly Glu Glu Asp Ala Asp Pro Gly Ala Met Ser Arg Pro
 130 135 140
 Phe Gly Val Ala Leu Leu Phe Gly Gly Val Asp Glu Lys Gly Pro Gln
 145 150 155 160
 Leu Phe His Met Asp Pro Ser Gly Thr Phe Val Gln Cys Asp Ala Arg
 165 170 175
 Ala Ile Gly Ser Ala Ser Glu Gly Ala Gln Ser Ser Leu Gln Glu Val
 180 185 190
 Tyr His Lys Ser Met Thr Leu Lys Glu Ala Ile Lys Ser Ser Leu Ile
 195 200 205
 Ile Leu Lys Gln Val Met Glu Glu Lys Leu Asn Ala Thr Asn Ile Glu
 210 215 220
 Leu Ala Thr Val Gln Pro Gly Gln Asn Phe His Met Phe Thr Lys Glu
 225 230 235 240
 Glu Leu Glu Glu Val Ile Lys Asp Ile
 245 249

<210> 3641
 <211> 417
 <212> PRT
 <213> Homo sapiens

<400> 3641
 Pro Thr Gly Gln Gly Arg Arg Ala Glu Ala Arg Ser Cys Leu Leu
 1 5 10 15
 Ser Lys Ala Met Leu Gly Arg Ser Gly Tyr Arg Ala Leu Pro Leu Gly
 20 25 30
 Asp Phe Asp Arg Phe Gln Gln Ser Ser Phe Gly Phe Leu Gly Ser Gln
 35 40 45
 Lys Gly Cys Leu Ser Pro Glu Arg Gly Gly Val Gly Thr Gly Ala Asp
 50 55 60
 Val Pro Gln Ser Trp Pro Ser Cys Leu Cys His Gly Leu Ile Ser Phe
 65 70 75 80
 Leu Gly Phe Leu Leu Leu Leu Val Thr Phe Pro Ile Ser Gly Trp Phe

85 90 95
 Ala Leu Lys Ile Val Pro Thr Tyr Glu Arg Met Ile Val Phe Arg Leu
 100 105 110
 Gly Arg Ile Arg Thr Pro Gln Gly Pro Gly Met Val Leu Leu Pro
 115 120 125
 Phe Ile Asp Ser Phe Gln Arg Val Asp Leu Arg Thr Arg Ala Phe Asn
 130 135 140
 Val Pro Pro Cys Lys Leu Ala Ser Lys Asp Gly Ala Val Leu Ser Val
 145 150 155 160
 Gly Ala Asp Val Gln Phe Arg Ile Trp Asp Pro Val Leu Ser Val Met
 165 170 175
 Thr Val Lys Asp Leu Asn Thr Ala Thr Arg Met Thr Ala Gln Asn Ala
 180 185 190
 Met Thr Lys Ala Leu Leu Lys Arg Pro Leu Arg Glu Ile Gln Met Glu
 195 200 205
 Lys Leu Lys Ile Ser Asp Gln Leu Leu Leu Glu Ile Asn Asp Val Thr
 210 215 220
 Arg Ala Trp Gly Leu Glu Val Asp Arg Val Glu Leu Ala Val Glu Ala
 225 230 235 240
 Val Leu Gln Pro Pro Gln Asp Ser Pro Ala Gly Pro Asn Leu Asp Ser
 245 250 255
 Thr Leu Gln Gln Leu Ala Leu His Phe Leu Gly Gly Ser Met Asn Ser
 260 265 270
 Met Ala Gly Gly Ala Pro Ser Pro Gly Pro Ala Asp Thr Val Glu Met
 275 280 285
 Val Ser Glu Val Glu Pro Pro Ala Pro Gln Val Gly Ala Arg Ser Ser
 290 295 300
 Pro Lys Gln Pro Leu Ala Glu Gly Leu Leu Thr Ala Leu Gln Pro Phe
 305 310 315 320
 Leu Ser Glu Ala Leu Val Ser Gln Val Gly Ala Cys Tyr Gln Phe Asn
 325 330 335
 Val Val Leu Pro Ser Gly Thr Gln Ser Ala Tyr Phe Leu Asp Leu Thr
 340 345 350
 Thr Gly Arg Gly Arg Val Gly His Gly Val Pro Asp Gly Ile Pro Asp
 355 360 365
 Val Val Val Glu Met Ala Glu Ala Asp Leu Arg Ala Leu Leu Cys Arg
 370 375 380
 Glu Leu Arg Pro Leu Gly Ala Tyr Met Ser Gly Arg Leu Lys Val Lys
 385 390 395 400
 Gly Asp Leu Ala Met Ala Met Lys Leu Glu Ala Val Leu Arg Ala Leu
 405 410 415
 Lys
 417

<210> 3642
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 3642
 Arg Arg Gly Glu Ile Asp Met Ala Thr Glu Gly Asp Val Glu Leu Glu
 1 5 10 15
 Leu Glu Thr Glu Thr Ser Gly Pro Glu Arg Pro Pro Glu Lys Pro Arg
 20 25 30
 Lys His Asp Ser Gly Ala Ala Asp Leu Glu Arg Val Thr Asp Tyr Ala
 35 40 45
 Glu Glu Lys Glu Ile Gln Ser Ser Asn Leu Glu Thr Ala Met Ser Val
 50 55 60
 Ile Gly Asp Arg Arg Ser Arg Glu Gln Lys Ala Lys Gln Glu Arg
 65 70 75 79

<210> 3643
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 3643
 Arg Lys Glu Arg Arg Arg Arg Arg Arg Met Glu Ala Val Val Phe
 1 5 10 15
 Val Phe Ser Leu Leu Asp Cys Cys Ala Leu Ile Phe Leu Ser Val Tyr
 20 25 30
 Phe Ile Ile Thr Leu Ser Asp Leu Glu Cys Asp Tyr Ile Asn Ala Arg
 35 40 45
 Ser Cys Cys Ser Lys Leu Asn Lys Trp Val Ile Pro Glu Leu Ile Gly
 50 55 60
 His Thr Ile Val Thr Val Leu Leu Leu Met Ser Leu His Trp Phe Ile
 65 70 75 80
 Phe Leu Leu Asn Leu Pro Val Ala Thr Trp Asn Ile Tyr Arg Tyr Ile
 85 90 95
 Met Val Pro Ser Gly Asn Met Gly Val Phe Asp Pro Thr Glu Ile His
 100 105 110
 Asn Arg Gly Gln Leu Lys Ser His Met Lys Glu Ala Met Ile Lys Leu
 115 120 125
 Gly Phe His Leu Leu Cys Phe Phe Met Tyr Leu Tyr Ser Met Ile Leu
 130 135 140
 Ala Leu Ile Asn Asp
 145 149

<210> 3644
 <211> 904
 <212> PRT
 <213> Homo sapiens

<400> 3644
 Thr Ser Cys Arg His Phe Pro Ile Thr Ser Glu Asp Pro Leu Asn Tyr
 1 5 10 15
 Leu Leu Ile Leu Thr Val Glu Arg Ile Tyr Ala Tyr Gln Ala Leu Pro
 20 25 30
 Leu Gly Phe Leu Phe Cys Ser Arg Asp Pro Val Pro Glu Tyr Leu Asn
 35 40 45
 His Cys Gly Val Lys Tyr Val Leu Ile Ser Asp Arg Ala Ser Phe Cys
 50 55 60
 Ala Leu His Ile Phe Phe Ser Pro Phe Arg Asn Val Phe Arg Pro Ala
 65 70 75 80
 Ala Gly Gly Gly Ile Ala Pro Pro Pro Arg Leu Trp Phe Gln Pro Ser
 85 90 95
 Leu Ser Asp Ala Glu Met Glu Ile Pro Lys Leu Leu Pro Ala Arg Gly
 100 105 110
 Thr Leu Gln Gly Gly Gly Gly Gly Ile Pro Ala Gly Gly Gly Arg
 115 120 125
 Val His Arg Gly Pro Asp Ser Pro Ala Gly Gln Val Pro Thr Arg Arg
 130 135 140
 Leu Leu Leu Pro Arg Gly Pro Gln Asp Gly Gly Pro Gly Arg Arg Arg
 145 150 155 160
 Glu Glu Ala Ser Thr Ala Ser Arg Gly Pro Gly Pro Ser Leu Phe Ala
 165 170 175
 Pro Arg Pro His Gln Pro Ser Gly Gly Gly Gly Gly Gly Asp Asp
 180 185 190
 Phe Phe Leu Val Leu Leu Asp Pro Val Gly Gly Asp Val Glu Thr Ala

5412

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705          710          715          720
Ala Ala Leu Leu Asp Thr Ala Leu Val Asn Ser Gly Ile Leu Thr Ile
          725          730          735
Asp Val Ala Ser Val Ser Ser Thr Leu Ala Gly His Leu Pro Ala Asn
          740          745          750
Asn Asn Asn Ser Val Gly Gln Ala Val Asp Pro Pro Ser Leu Met Ala
          755          760          765
Thr Ser Asp Pro Pro Gln Ser Leu Asp Thr Ser Leu Phe Phe Gly Thr
          770          775          780
Ala Ala Thr Gly Phe Gln Gln Ser Ser Leu Asn Met Asp Glu Val Ser
785          790          795          800
Ser Val Ser Val Gly Pro Leu Gly Ser Leu Asp Ser Leu Ala Met Lys
          805          810          815
Asn Ser Ser Pro Glu Pro Gln Ala Leu Thr Pro Ser Ser Lys Leu Thr
          820          825          830
Val Asp Thr Asp Thr Leu Thr Pro Ser Ser Thr Leu Cys Glu Asn Ser
          835          840          845
Val Ser Glu Leu Leu Thr Pro Ala Lys Ala Glu Trp Ser Val His Pro
          850          855          860
Asn Ser Asp Phe Phe Gly Gln Glu Gly Glu Thr Gln Phe Gly Phe Pro
865          870          875          880
Asn Ala Ala Gly Asn His Gly Ser Gln Lys Glu Arg Asn Leu Ile Thr
          885          890          895
Val Thr Gly Ser Ser Phe Leu Val
          900          904

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<210> 3645
<211> 162
<212> PRT
<213> Homo sapiens

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          <400> 3645
Thr Val Ser Phe His Lys Thr Met Ala Ser Leu Lys Cys Ser Thr Val
1          5          10          15
Val Cys Val Ile Cys Leu Glu Lys Pro Lys Tyr Arg Cys Pro Ala Cys
          20          25          30
Arg Val Pro Tyr Cys Ser Val Val Cys Phe Arg Lys His Lys Glu Gln
          35          40          45
Cys Asn Pro Glu Thr Arg Pro Val Glu Lys Lys Ile Arg Ser Ala Leu
          50          55          60
Pro Thr Lys Thr Val Lys Pro Val Glu Asn Lys Asp Asp Asp Asp Ser
65          70          75          80
Ile Ala Asp Phe Leu Asn Ser Asp Glu Glu Asp Arg Val Ser Leu
          85          90          95
Gln Asn Leu Lys Asn Leu Gly Glu Ser Ala Thr Leu Arg Ser Leu Leu
          100          105          110
Leu Asn Pro His Leu Arg Gln Leu Met Val Asn Leu Asp Gln Gly Glu
          115          120          125
Asp Lys Ala Lys Leu Met Arg Ala Tyr Met Gln Glu Pro Leu Phe Val
130          135          140
Glu Phe Ala Asp Cys Cys Leu Gly Ile Val Glu Pro Ser Gln Asn Glu
145          150          155          160
Glu Ser
162

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<210> 3646
<211> 621
<212> PRT
<213> Homo sapiens

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<400> 3646

Glu Arg Gly Gly Gly Lys Ala Ala Ala Ala Ala Ala Ala Ala Ala
 1 5 10 15
 Ala Arg Ala Leu Ala Ala Ser Gly Gln Asp Pro Arg Pro His Pro Arg
 20 25 30
 Ala Pro Pro Trp Asp Asp Ser Gly Asp Asp Asp Glu Ala Thr Thr Pro
 35 40 45
 Ala Asp Lys Ser Glu Leu His His Thr Leu Lys Asn Leu Ser Leu Lys
 50 55 60
 Leu Asp Asp Leu Ser Thr Cys Asn Asp Leu Ile Ala Lys His Gly Ala
 65 70 75 80
 Ala Leu Gln Arg Ser Leu Thr Glu Leu Asp Gly Leu Lys Ile Pro Ser
 85 90 95
 Glu Ser Gly Glu Lys Leu Lys Val Val Asn Glu Arg Ala Thr Leu Phe
 100 105 110
 Arg Ile Thr Ser Asn Ala Met Ile Asn Ala Cys Arg Asp Phe Leu Glu
 115 120 125
 Leu Ala Glu Ile His Ser Arg Lys Trp Gln Arg Ala Leu Gln Tyr Glu
 130 135 140
 Gln Glu Gln Arg Val His Leu Glu Glu Thr Ile Glu Gln Leu Ala Lys
 145 150 155 160
 Gln His Asn Ser Leu Glu Arg Ala Phe His Ser Ala Pro Gly Arg Pro
 165 170 175
 Ala Asn Pro Ser Lys Ser Phe Ile Glu Gly Ser Leu Leu Thr Pro Lys
 180 185 190
 Gly Glu Asp Ser Glu Glu Asp Glu Asp Thr Glu Tyr Phe Asp Ala Met
 195 200 205
 Glu Asp Ser Thr Ser Phe Ile Thr Val Ile Thr Glu Ala Lys Glu Asp
 210 215 220
 Ser Arg Lys Ala Glu Gly Ser Thr Gly Thr Ser Ser Ala Asp Trp Ser
 225 230 235 240
 Ser Ala Asp Asn Val Leu Asp Gly Ala Ser Leu Val Pro Lys Gly Ser
 245 250 255
 Ser Lys Val Lys Arg Arg Val Arg Ile Pro Asn Lys Pro Asn Tyr Ser
 260 265 270
 Leu Asn Leu Trp Ser Ile Met Lys Asn Cys Ile Gly Arg Glu Leu Ser
 275 280 285
 Arg Ile Pro Met Pro Val Asn Phe Asn Glu Pro Leu Ser Met Leu Gln
 290 295 300
 Arg Leu Thr Glu Asp Leu Glu Tyr His His Leu Leu Asp Lys Ala Val
 305 310 315 320
 His Cys Thr Ser Ser Val Glu Gln Met Cys Leu Val Ala Ala Phe Ser
 325 330 335
 Val Ser Ser Tyr Ser Thr Thr Val His Arg Ile Ala Lys Pro Phe Asn
 340 345 350
 Pro Met Leu Gly Glu Thr Phe Glu Leu Asp Arg Leu Asp Asp Met Gly
 355 360 365
 Leu Arg Ser Leu Cys Glu Gln Val Ser His His Pro Pro Ser Ala Ala
 370 375 380
 His Tyr Val Phe Ser Lys His Gly Trp Ser Leu Trp Gln Glu Ile Thr
 385 390 395 400
 Ile Ser Ser Lys Phe Arg Gly Lys Tyr Ile Ser Ile Met Pro Leu Gly
 405 410 415
 Ala Ile His Leu Glu Phe Gln Ala Ser Gly Asn His Tyr Val Trp Arg
 420 425 430
 Lys Ser Thr Ser Thr Val His Asn Ile Ile Val Gly Lys Leu Trp Ile
 435 440 445
 Asp Gln Ser Gly Asp Ile Glu Ile Val Asn His Lys Thr Asn Asp Arg
 450 455 460
 Cys Gln Leu Lys Phe Leu Pro Tyr Ser Tyr Phe Ser Lys Glu Ala Ala
 465 470 475 480
 Arg Lys Val Thr Gly Val Val Ser Asp Ser Gln Gly Lys Ala His Tyr

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<210> 3647
<211> 1654
<212> PRT
<213> Homo sapiens
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5415

290	295	300
Gly Ala Pro Ala Tyr	Pro Gln Trp Ala Ser	Gln Pro Ser Val Leu Asp
305	310	315
Ser Ile Asn Pro Asp	Lys His Phe Thr Val	Asn Lys Asn Phe Leu Ser
325	330	335
Asn Tyr Ser Arg Asn	Phe Ser Ser Phe His	Glu Asp Ser Thr Ser Leu
340	345	350
Ser Gly Leu Gly Asp	Ser Thr Glu Pro Ser	Leu Ser Ser Met Tyr Gly
355	360	365
Asp Ala Glu Asp Ser	Ser Ser Ser Asp Pro	Glu Ser Leu Thr Glu Ala Pro
370	375	380
Arg Ala Ser Ala Arg	Asp Gly Trp Ser Pro	Pro Arg Ser Arg Val Ser
385	390	395
Leu His Lys Glu Asp	Pro Ser Glu Ser Glu	Glu Glu Gln Ile Glu Ile
405	410	415
Cys Ser Thr Arg Gly	Cys Pro Asn Pro Pro	Ser Ser Pro Ala His Leu
420	425	430
Pro Thr Gln Ala Ala	Ile Cys Pro Ala Ser	Ala Lys Val Leu Ser Leu
435	440	445
Lys Tyr Ser Thr Pro	Arg Glu Ser Val Ala	Ser Pro Arg Glu Lys Val
450	455	460
Ala Cys Leu Pro Gly	Ser Tyr Thr Ser Gly	Pro Asp Ser Ser Gln Pro
465	470	475
Ser Ser Leu Leu Glu	Met Ser Ser Gln Glu	His Glu Thr His Ala Asp
485	490	495
Ile Ser Thr Ser Gln	Asn His Arg Pro Ser	Cys Ala Glu Glu Thr Thr
500	505	510
Glu Val Thr Ser Ala	Ser Ser Ala Met Glu	Asn Ser Pro Leu Ser Lys
515	520	525
Val Ala Arg His Phe	His Ser Pro Pro Ile	Ile Leu Ser Ser Pro Asn
530	535	540
Met Val Asn Gly Leu	Glu His Asp Leu Leu	Asp Asp Glu Thr Leu Asn
545	550	555
Gln Tyr Glu Thr Ser	Ile Asn Ala Ala Ala	Ser Leu Ser Ser Phe Ser
565	570	575
Val Asp Val Pro Lys	Asn Gly Glu Ser Val	Leu Glu Asn Leu His Ile
580	585	590
Ser Glu Ser Gln Asp	Leu Asp Asp Leu Leu	Gln Lys Pro Lys Met Ile
595	600	605
Ala Arg Arg Pro Ile	Met Ala Trp Phe Lys	Glu Ile Asn Lys His Asn
610	615	620
Gln Gly Thr His Leu	Arg Ser Lys Thr Glu	Lys Glu Gln Pro Leu Met
625	630	635
Pro Ala Arg Ser Pro	Asp Ser Lys Ile Gln	Met Val Ser Ser Ser Gln
645	650	655
Lys Lys Gly Val Thr	Val Pro His Ser Pro	Pro Gln Pro Lys Thr Asn
660	665	670
Leu Glu Asn Lys Asp	Leu Ser Lys Lys Ser	Pro Ala Glu Met Leu Leu
675	680	685
Thr Asn Gly Gln Lys	Ala Lys Cys Gly Pro	Lys Leu Lys Arg Leu Ser
690	695	700
Leu Lys Gly Lys Ala	Lys Val Asn Ser Glu	Ala Pro Ala Ala Asn Ala
705	710	715
Val Lys Ala Gly Gly	Thr Asp His Arg Lys	Pro Leu Ile Ser Pro Gln
725	730	735
Thr Ser His Lys Thr	Leu Ser Lys Ala Val	Ser Gln Arg Leu His Val
740	745	750
Ala Asp His Glu Asp	Pro Asp Arg Asn Thr	Thr Ala Ala Pro Arg Ser
755	760	765
Pro Gln Cys Val Leu	Glu Ser Lys Pro Pro	Leu Ala Thr Ser Gly Pro
770	775	780
Leu Lys Pro Ser Val	Ser Asp Thr Ser Ile	Arg Thr Phe Val Ser Pro
785	790	795
Leu Thr Ser Pro Lys	Pro Val Pro Glu Gln	Gly Met Trp Ser Arg Phe

5417

1315 1320 1325
 Leu Glu Ile Thr Pro Arg Arg Ser Pro Gly Pro Pro Ala Gly Gly Val
 1330 1335 1340
 Ser Cys Pro Glu Lys Gly Gly Asn Arg Ala Cys Pro Gly Gly Ser Gly
 1345 1350 1355 1360
 Pro Lys Thr Ser Ala Ala Glu Thr Pro Ser Ser Ala Ser Asp Thr Gly
 1365 1370 1375
 Glu Ala Ala Gln Asp Leu Pro Phe Arg Arg Ser Trp Ser Val Asn Leu
 1380 1385 1390
 Asp Gln Leu Leu Val Ser Ala Gly Asp Gln Gln Arg Leu Gln Ser Val
 1395 1400 1405
 Leu Ser Ser Val Gly Ser Lys Ser Thr Ile Leu Thr Leu Ile Gln Glu
 1410 1415 1420
 Ala Lys Ala Gln Ser Glu Asn Glu Glu Asp Val Cys Phe Ile Val Leu
 1425 1430 1435 1440
 Asn Arg Lys Glu Gly Ser Gly Leu Gly Phe Ser Val Ala Gly Gly Thr
 1445 1450 1455
 Asp Val Glu Pro Lys Ser Ile Thr Val His Arg Val Phe Ser Gln Gly
 1460 1465 1470
 Ala Ala Ser Gln Glu Gly Thr Met Asn Arg Gly Asp Phe Leu Leu Ser
 1475 1480 1485
 Val Asn Gly Ala Ser Leu Ala Gly Leu Ala His Gly Asn Val Leu Lys
 1490 1495 1500
 Val Leu His Gln Ala Gln Leu His Lys Asp Ala Leu Val Val Ile Lys
 1505 1510 1515 1520
 Lys Gly Met Asp Gln Pro Arg Pro Ser Ala Arg Gln Glu Pro Pro Thr
 1525 1530 1535
 Ala Asn Gly Lys Gly Leu Leu Ser Arg Lys Thr Ile Pro Leu Glu Pro
 1540 1545 1550
 Gly Ile Gly Arg Ser Val Ala Val His Asp Ala Leu Cys Val Glu Val
 1555 1560 1565
 Leu Lys Thr Ser Ala Gly Leu Gly Leu Ser Leu Asp Gly Gly Lys Ser
 1570 1575 1580
 Ser Val Thr Gly Asp Gly Pro Leu Val Ile Lys Arg Val Tyr Lys Gly
 1585 1590 1595 1600
 Gly Ala Ala Glu Gln Ala Gly Ile Ile Glu Ala Gly Asp Glu Ile Leu
 1605 1610 1615
 Ala Ile Asn Gly Lys Pro Leu Val Gly Leu Met His Phe Asp Ala Trp
 1620 1625 1630
 Asn Ile Met Lys Ser Val Pro Glu Gly Pro Val Gln Leu Leu Ile Arg
 1635 1640 1645
 Lys His Arg Asn Ser Ser
 1650 1654

<210> 3648
 <211> 409
 <212> PRT
 <213> Homo sapiens

<400> 3648
 Lys Ser Arg Leu Ser Val Thr Leu Met Pro Val Gln Leu Ser Glu His
 1 5 10 15
 Pro Glu Trp Asn Glu Ser Met His Ser Leu Arg Ile Ser Val Gly Gly
 20 25 30
 Leu Pro Val Leu Ala Ser Met Thr Lys Ala Ala Asp Pro Arg Phe Arg
 35 40 45
 Pro Arg Trp Lys Val Val Leu Thr Phe Phe Val Gly Ala Ala Ile Leu
 50 55 60
 Trp Leu Leu Cys Ser His Arg Pro Ala Pro Gly Arg Pro Pro Thr His
 65 70 75 80
 Asn Ala His Asn Trp Arg Leu Gly Gln Ala Pro Ala Asn Trp Tyr Asn


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<210> 3649
<211> 258
<212> PRT
<213> Homo sapiens
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<400> 3649															
Pro	Thr	Arg	Pro	Gly	Ser	Gly	Ser	Ala	Gly	Gly	Ala	Arg	Val	Gly	Ser
1				5					10					15	
Gly	Glu	Phe	Gly	Val	Glu	Met	Ala	Ala	Leu	Ala	Pro	Leu	Pro	Pro	Leu
			20					25					30		
Pro	Ala	Gln	Phe	Lys	Ser	Ile	Gln	His	His	Leu	Arg	Thr	Ala	Gln	Glu
		35					40					45			
His	Asp	Lys	Arg	Asp	Pro	Val	Val	Ala	Tyr	Tyr	Cys	Arg	Leu	Tyr	Ala
	50					55					60				
Met	Gln	Thr	Gly	Met	Lys	Ile	Asp	Ser	Lys	Thr	Pro	Glu	Cys	Arg	Lys
65					70					75					80
Phe	Leu	Ser	Lys	Leu	Met	Asp	Gln	Leu	Glu	Ala	Leu	Lys	Lys	Gln	Leu
				85					90					95	
Gly	Asp	Asn	Glu	Ala	Ile	Thr	Gln	Glu	Ile	Val	Gly	Cys	Ala	His	Leu

100	105	110
Glu Asn Tyr Ala Leu Lys Met Phe Leu Tyr Ala Asp Asn Glu Asp Arg		
115	120	125
Ala Gly Arg Phe His Lys Asn Met Ile Lys Ser Phe Tyr Thr Ala Ser		
130	135	140
Leu Leu Ile Asp Val Ile Thr Val Phe Gly Glu Leu Thr Asp Glu Asn		
145	150	155
Val Lys His Arg Lys Tyr Ala Arg Trp Lys Ala Thr Tyr Ile His Asn		
165	170	175
Cys Leu Lys Asn Gly Glu Thr Pro Gln Ala Gly Pro Val Gly Ile Glu		
180	185	190
Glu Asp Asn Asp Ile Glu Glu Asn Glu Asp Ala Gly Ala Ala Ser Leu		
195	200	205
Pro Thr Gln Pro Thr Gln Pro Ser Ser Ser Ser Thr Tyr Asp Pro Ser		
210	215	220
Asn Met Pro Ser Gly Asn Tyr Thr Gly Ile Gln Ile Pro Pro Gly Ala		
225	230	235
His Ala Pro Ala Asn Thr Pro Ala Glu Val Pro His Ser Thr Gly Val		
245	250	255
Ala Lys		
258		

<210> 3650
 <211> 314
 <212> PRT
 <213> Homo sapiens

<400> 3650

Lys Met Ala Ala Thr Leu Gly Pro Leu Gly Ser Trp Gln Gln Trp Arg	
1	5
Arg Cys Leu Ser Ala Arg Asp Gly Ser Arg Arg Leu Leu Leu Leu	
20	25
Leu Leu Gly Ser Gly Gln Gly Pro Gln Gln Val Gly Ala Gly Gln Thr	
35	40
Phe Glu Tyr Leu Lys Arg Glu His Ser Leu Ser Lys Pro Tyr Gln Gly	
50	55
Glu Ala Pro Arg Pro Cys Phe Leu Arg Asp Trp Glu Leu Gln Val His	
65	70
Phe Lys Ile His Gly Gln Gly Lys Lys Asn Leu His Gly Asp Gly Leu	
85	90
Ala Ile Trp Tyr Thr Lys Asp Arg Met Gln Pro Gly Pro Val Phe Gly	
100	105
Asn Met Asp Lys Phe Val Gly Leu Gly Val Phe Val Asp Thr Tyr Pro	
115	120
Asn Glu Glu Lys Gln Gln Glu Arg Val Phe Pro Tyr Ile Ser Ala Met	
130	135
Val Asn Asn Gly Ser Leu Ser Tyr Asp His Glu Arg Asp Gly Arg Pro	
145	150
Thr Glu Leu Gly Gly Cys Thr Ala Ile Val Arg Asn Leu His Tyr Asp	
165	170
Thr Phe Leu Val Ile Arg Tyr Val Lys Arg His Leu Thr Ile Met Met	
180	185
Asp Ile Asp Gly Lys His Glu Trp Arg Asp Cys Ile Glu Val Pro Gly	
195	200
Val Arg Leu Pro Arg Gly Tyr Tyr Phe Gly Thr Ser Ser Ile Thr Gly	
210	215
Asp Leu Ser Asp Asn His Asp Val Ile Ser Leu Lys Leu Phe Glu Leu	
225	230
Thr Val Glu Arg Thr Pro Glu Glu Glu Lys Leu His Arg Asp Val Phe	
245	250
Leu Pro Ser Val Asp Asn Met Lys Leu Pro Glu Met Thr Ala Pro Leu	
	255

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<210> 3651
<211> 406
<212> PRT
<213> Homo sapiens
```

5421

370 375 380
 Phe Phe Thr Thr Leu Arg Val Val His His Lys Phe His Ser Gln Arg
 385 390 395 400
 His Gly Ser Lys Lys Asp
 405 406

<210> 3652
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 3652
 Val Thr Thr Ser Cys Ile Ile Pro Phe Ala Phe Gly Leu Gly Val Arg
 1 5 10 15
 Ala Ser Glu Arg Leu Ala Glu Ile Asp Met Pro Tyr Leu Leu Lys Tyr
 20 25 30
 Gln Pro Met Met Gln Thr Ile Gly Gln Lys Tyr Cys Met Asp Pro Ala
 35 40 45
 Val Ile Ala Gly Val Leu Ser Arg Lys Ser Pro Gly Asp Lys Ile Leu
 50 55 60
 Val Asn Met Gly Asp Arg Thr Ser Met Val Gln Asp Pro Gly Ser Gln
 65 70 75 80
 Ala Pro Thr Ser Trp Ile Ser Glu Ser Gln Val Phe Gln Thr Thr Glu
 85 90 95
 Val Leu Thr Thr Arg Ile Thr Glu Leu Gln Arg Arg Phe Pro Thr Trp
 100 105 110
 Thr Pro Asp Gln Tyr Leu Arg Gly Gly Leu Cys Ala Tyr Ser Gly Gly
 115 120 125
 Ala Gly Tyr Val Arg Ser Ser Gln Asp Leu Ser Cys Asp Phe Cys Asn
 130 135 140
 Asp Val Leu Ala Arg Ala Lys Tyr Leu Lys Arg His Gly Phe
 145 150 155 158

<210> 3653
 <211> 302
 <212> PRT
 <213> Homo sapiens

<400> 3653
 Ile Val Arg Arg Asp Trp Gln Glu Val Ser Asp Ile His Leu Ala Met
 1 5 10 15
 Ala Asn Cys Lys Met Thr Lys Ser Ile Arg Phe Pro Ala Leu Glu His
 20 25 30
 Cys Tyr Thr Gly Gly Glu Val Val Leu Pro Lys Asp Gln Glu Glu Trp
 35 40 45
 Lys Arg Arg Thr Gly Leu Leu Leu Tyr Glu Asn Tyr Gly Gln Ser Glu
 50 55 60
 Thr Gly Leu Ile Cys Ala Thr Tyr Trp Gly Met Lys Ile Lys Pro Gly
 65 70 75 80
 Phe Met Gly Lys Ala Thr Pro Pro Tyr Asp Val Gln Phe His Met Glu
 85 90 95
 Ala Ser Val Glu Asn Cys Ile Ile Val Ser Met Asn Thr Ala Asp Pro
 100 105 110
 Gly Ser Gln Gly Ile Thr His Ser Leu Leu Leu Gln Val Ile Asp Asp
 115 120 125
 Lys Gly Ser Ile Leu Pro Pro Asn Thr Glu Gly Asn Ile Gly Ile Arg
 130 135 140
 Ile Lys Pro Val Arg Pro Val Ser Leu Phe Met Cys Tyr Glu Gly Asp

145		150		155		160									
Pro	Glu	Lys	Thr	Ala	Lys	Val	Glu	Cys	Gly	Asp	Phe	Tyr	Asn	Thr	Gly
				165					170						175
Asp	Arg	Gly	Lys	Met	Asp	Glu	Glu	Gly	Tyr	Ile	Cys	Phe	Leu	Gly	Arg
			180					185						190	
Ser	Asp	Asp	Ile	Ile	Asn	Ala	Ser	Gly	Tyr	Arg	Ile	Gly	Pro	Ala	Glu
		195					200					205			
Val	Glu	Ser	Ala	Leu	Val	Glu	His	Pro	Ala	Val	Ala	Glu	Ser	Ala	Val
	210					215					220				
Val	Gly	Ser	Pro	Asp	Pro	Ile	Arg	Gly	Glu	Val	Val	Lys	Ala	Phe	Ile
225					230					235					240
Val	Leu	Thr	Pro	Gln	Phe	Leu	Ser	His	Asp	Lys	Asp	Gln	Leu	Thr	Lys
				245					250					255	
Glu	Leu	Gln	Gln	His	Val	Lys	Ser	Val	Thr	Ala	Pro	Tyr	Lys	Tyr	Pro
		260						265					270		
Arg	Lys	Val	Glu	Phe	Val	Ser	Glu	Leu	Pro	Lys	Thr	Ile	Thr	Gly	Lys
	275						280					285			
Ile	Glu	Arg	Lys	Glu	Leu	Arg	Lys	Lys	Glu	Thr	Gly	Gln	Met		
	290					295					300		302		

<210> 3654

<211> 302

<212> PRT

<213> Homo sapiens

<400> 3654

Ile	Val	Arg	Arg	Asp	Trp	Gln	Glu	Val	Ser	Asp	Ile	His	Leu	Ala	Met
1				5					10					15	
Ala	Asn	Cys	Lys	Met	Thr	Lys	Ser	Ile	Arg	Phe	Pro	Ala	Leu	Glu	His
			20					25					30		
Cys	Tyr	Thr	Gly	Gly	Glu	Val	Val	Leu	Pro	Lys	Asp	Gln	Glu	Glu	Trp
		35					40					45			
Lys	Arg	Arg	Thr	Gly	Leu	Leu	Leu	Tyr	Glu	Asn	Tyr	Gly	Gln	Ser	Glu
		50				55					60				
Thr	Gly	Leu	Ile	Cys	Ala	Thr	Tyr	Trp	Gly	Met	Lys	Ile	Lys	Pro	Gly
	65				70					75					80
Phe	Met	Gly	Lys	Ala	Thr	Pro	Pro	Tyr	Asp	Val	Gln	Phe	His	Met	Glu
			85					90						95	
Ala	Ser	Val	Glu	Asn	Cys	Ile	Ile	Val	Ser	Met	Asn	Thr	Ala	Asp	Pro
		100						105					110		
Gly	Ser	Gln	Gly	Ile	Thr	His	Ser	Leu	Leu	Leu	Gln	Val	Ile	Asp	Asp
		115				120					125				
Lys	Gly	Ser	Ile	Leu	Pro	Pro	Asn	Thr	Glu	Gly	Asn	Ile	Gly	Ile	Arg
	130					135					140				
Ile	Lys	Pro	Val	Arg	Pro	Val	Ser	Leu	Phe	Met	Cys	Tyr	Glu	Gly	Asp
145				150					155					160	
Pro	Glu	Lys	Thr	Ala	Lys	Val	Glu	Cys	Gly	Asp	Phe	Tyr	Asn	Thr	Gly
				165					170					175	
Asp	Arg	Gly	Lys	Met	Asp	Glu	Glu	Gly	Tyr	Ile	Cys	Phe	Leu	Gly	Arg
			180					185					190		
Ser	Asp	Asp	Ile	Ile	Asn	Ala	Ser	Gly	Tyr	Arg	Ile	Gly	Pro	Ala	Glu
		195					200					205			
Val	Glu	Ser	Ala	Leu	Val	Glu	His	Pro	Ala	Val	Ala	Glu	Ser	Ala	Val
	210					215					220				
Val	Gly	Ser	Pro	Asp	Pro	Ile	Arg	Gly	Glu	Val	Val	Lys	Ala	Phe	Ile
225					230					235					240
Val	Leu	Thr	Pro	Gln	Phe	Leu	Ser	His	Asp	Lys	Asp	Gln	Leu	Thr	Lys
				245					250					255	
Glu	Leu	Gln	Gln	His	Val	Lys	Ser	Val	Thr	Ala	Pro	Tyr	Lys	Tyr	Pro
		260						265					270		
Arg	Lys	Val	Glu	Phe	Val	Ser	Glu	Leu	Pro	Lys	Thr	Ile	Thr	Gly	Lys

	275		280		285
Ile	Glu Arg Lys Glu Leu Arg	Lys Lys Glu Thr Gly	Gln Met		
290		295	300	302	

<210> 3655
 <211> 787
 <212> PRT
 <213> Homo sapiens

<400> 3655

Ser	Pro	Gly	Pro	Ser	Leu	Pro	Glu	Ser	Ala	Glu	Ser	Leu	Asp	Gly	Ser
1				5					10					15	
Gln	Glu	Asp	Lys	Pro	Arg	Gly	Ser	Cys	Ala	Glu	Pro	Thr	Phe	Thr	Asp
			20					25					30		
Thr	Gly	Met	Val	Ala	His	Ile	Asn	Asn	Ser	Arg	Leu	Lys	Ala	Lys	Gly
		35					40					45			
Val	Gly	Gln	His	Asp	Asn	Ala	Gln	Asn	Phe	Gly	Asn	Gln	Ser	Phe	Glu
		50				55					60				
Glu	Leu	Arg	Ala	Ala	Cys	Leu	Arg	Lys	Gly	Glu	Leu	Phe	Glu	Asp	Pro
		65			70					75				80	
Leu	Phe	Pro	Ala	Glu	Pro	Ser	Ser	Leu	Gly	Phe	Lys	Asp	Leu	Gly	Pro
				85					90					95	
Asn	Ser	Lys	Asn	Val	Gln	Asn	Ile	Ser	Trp	Gln	Arg	Pro	Lys	Asp	Ile
			100					105					110		
Ile	Asn	Asn	Pro	Leu	Phe	Ile	Met	Asp	Gly	Ile	Ser	Pro	Thr	Asp	Ile
		115					120					125			
Cys	Gln	Gly	Ile	Leu	Gly	Asp	Cys	Trp	Leu	Leu	Ala	Ala	Ile	Gly	Ser
		130				135					140				
Leu	Thr	Thr	Cys	Pro	Lys	Leu	Leu	Tyr	Arg	Val	Val	Pro	Arg	Gly	Gln
		145			150					155				160	
Ser	Phe	Lys	Lys	Asn	Tyr	Ala	Gly	Ile	Phe	His	Phe	Gln	Ile	Trp	Gln
			165					170					175		
Phe	Gly	Gln	Trp	Val	Asn	Val	Val	Val	Asp	Asp	Arg	Leu	Pro	Thr	Lys
			180					185					190		
Asn	Asp	Lys	Leu	Val	Phe	Val	His	Ser	Thr	Glu	Arg	Ser	Glu	Phe	Trp
		195					200					205			
Ser	Ala	Leu	Leu	Glu	Lys	Ala	Tyr	Ala	Lys	Leu	Ser	Gly	Ser	Tyr	Glu
		210				215					220				
Ala	Leu	Ser	Gly	Gly	Ser	Thr	Met	Glu	Gly	Leu	Glu	Asp	Phe	Thr	Gly
		225				230				235				240	
Gly	Val	Ala	Gln	Ser	Phe	Gln	Leu	Gln	Arg	Pro	Pro	Gln	Asn	Leu	Leu
			245						250					255	
Arg	Leu	Leu	Arg	Lys	Ala	Val	Glu	Arg	Ser	Ser	Leu	Met	Gly	Cys	Ser
		260					265						270		
Ile	Glu	Val	Thr	Ser	Asp	Ser	Glu	Leu	Glu	Ser	Met	Thr	Asp	Lys	Met
		275					280					285			
Leu	Val	Arg	Gly	His	Ala	Tyr	Ser	Val	Thr	Gly	Leu	Gln	Asp	Val	His
		290				295					300				
Tyr	Arg	Gly	Lys	Met	Glu	Thr	Leu	Ile	Arg	Val	Arg	Asn	Pro	Trp	Gly
				310						315				320	
Arg	Ile	Glu	Trp	Asn	Gly	Ala	Trp	Ser	Asp	Ser	Ala	Arg	Glu	Trp	Glu
			325						330					335	
Glu	Val	Ala	Ser	Asp	Ile	Gln	Met	Gln	Leu	Leu	His	Lys	Thr	Glu	Asp
			340					345					350		
Gly	Glu	Phe	Trp	Met	Ser	Tyr	Gln	Asp	Phe	Leu	Asn	Asn	Phe	Thr	Leu
		355					360					365			
Leu	Glu	Ile	Cys	Asn	Leu	Thr	Pro	Asp	Thr	Leu	Ser	Gly	Asp	Tyr	Lys
		370				375					380				
Ser	Tyr	Trp	His	Thr	Thr	Phe	Tyr	Glu	Gly	Ser	Trp	Arg	Thr	Gly	Ser
		385			390					395				400	
Ser	Ala	Gly	Gly	Cys	Arg	Asn	His	Pro	Gly	Thr	Phe	Trp	Thr	Asn	Pro

405 410 415
 Gln Phe Lys Ile Ser Leu Pro Glu Gly Asp Asp Pro Glu Asp Asp Ala
 420 425 430
 Glu Gly Asn Val Val Val Cys Thr Cys Leu Val Ala Leu Met Gln Lys
 435 440 445
 Asn Trp Arg His Ala Arg Gln Gln Gly Ala Gln Leu Gln Thr Ile Gly
 450 455 460
 Phe Val Leu Tyr Ala Val Pro Lys Glu Phe Gln Asn Ile Gln Asp Val
 465 470 475 480
 His Leu Lys Lys Glu Phe Phe Thr Lys Tyr Gln Asp His Gly Phe Ser
 485 490 495
 Glu Ile Phe Thr Asn Ser Arg Glu Val Ser Ser Gln Leu Arg Leu Pro
 500 505 510
 Pro Gly Glu Tyr Ile Ile Ile Pro Ser Thr Phe Glu Pro His Arg Asp
 515 520 525
 Ala Asp Phe Leu Leu Arg Val Phe Thr Glu Lys His Ser Glu Ser Trp
 530 535 540
 Glu Leu Asp Glu Val Asn Tyr Ala Glu Gln Leu Gln Glu Glu Lys Val
 545 550 555 560
 Ser Glu Asp Asp Met Asp Gln Asp Phe Leu His Leu Phe Lys Ile Val
 565 570 575
 Ala Gly Glu Gly Lys Glu Ile Gly Val Tyr Glu Leu Gln Arg Leu Leu
 580 585 590
 Asn Arg Met Ala Ile Lys Phe Lys Ser Phe Lys Thr Lys Gly Phe Gly
 595 600 605
 Leu Asp Ala Cys Arg Cys Met Ile Asn Leu Met Asp Lys Asp Gly Ser
 610 615 620
 Gly Lys Leu Gly Leu Leu Glu Phe Lys Ile Leu Trp Lys Lys Leu Lys
 625 630 635 640
 Lys Trp Met Asp Ile Phe Arg Glu Cys Asp Gln Asp His Ser Gly Thr
 645 650 655
 Leu Asn Ser Tyr Glu Met Arg Leu Val Ile Glu Lys Ala Gly Ile Lys
 660 665 670
 Leu Asn Asn Lys Val Met Gln Val Leu Val Ala Arg Tyr Ala Asp Asp
 675 680 685
 Asp Leu Ile Ile Asp Phe Asp Ser Phe Ile Ser Cys Phe Leu Arg Leu
 690 695 700
 Lys Thr Met Phe Thr Phe Phe Leu Thr Met Asp Pro Lys Asn Thr Gly
 705 710 715 720
 His Ile Cys Leu Ser Leu Glu Gln Val Leu Gly Glu Gly Trp Glu Gly
 725 730 735
 Ile Cys Arg Ile Ala Pro Ala Cys Pro Ser Thr Pro Pro Pro Pro Ser
 740 745 750
 Ser Asp Val Pro Gly Pro Ala Ser Cys Pro Arg Leu Phe Pro Pro Trp
 755 760 765
 Asp Leu Leu Pro Val Ser Thr Val Ala Ala Asp Asp His Val Gly Ile
 770 775 780
 Glu Ala Leu
 785 787

<210> 3656

<211> 56

<212> PRT

<213> Homo sapiens

<400> 3656

Pro Leu Cys Thr His Tyr Leu Leu Pro Glu Leu Pro Glu Lys Ser Ser
 1 5 10 15
 Arg Thr Ser Pro Arg Ser Arg Pro Gly Asn Met Leu Ser Gly Asp Pro
 20 25 30
 His Leu Pro Gln Pro Leu Cys His Cys Leu Asp His Cys Pro Cys Cys

35 40 45
Phe Ser Gly Lys Arg Leu Val Ala
50 55 56

<210> 3657
<211> 148
<212> PRT
<213> Homo sapiens

<400> 3657
Asp Thr Arg Ser Thr Tyr His Asn Ala His Ser Leu Pro Thr Tyr Val
1 5 10 15
Lys Ser Pro Ala Pro Cys Gln Met Thr Tyr Ile Lys Ser Pro Ala Pro
20 25 30
Cys Gln Thr Gln Thr Cys Tyr Val Gln Gly Ala Ser Pro Cys Gln Ser
35 40 45
Tyr Tyr Val Gln Ala Pro Ala Ser Gly Ser Thr Ser Gln Tyr Cys Val
50 55 60
Thr Asp Pro Cys Ser Ala Pro Cys Ser Thr Ser Tyr Cys Cys Leu Ala
65 70 75 80
Pro Arg Thr Phe Gly Val Ser Pro Leu Arg Arg Trp Ile Gln Arg Pro
85 90 95
Gln Asn Cys Asn Thr Gly Ser Ser Gly Cys Cys Glu Asn Ser Gly Ser
100 105 110
Ser Gly Cys Cys Gly Ser Gly Gly Cys Gly Cys Ser Cys Gly Cys Gly
115 120 125
Ser Ser Gly Cys Cys Cys Leu Gly Ile Ile Pro Met Lys Ser Arg Ser
130 135 140
Pro Ala Leu Leu
145 148

<210> 3658
<211> 482
<212> PRT
<213> Homo sapiens

<400> 3658
Ser Glu Ala Pro Val Gln Pro Gln Pro Tyr Thr Met Thr Ser Phe Tyr
1 5 10 15
Ser Thr Ser Ser Cys Pro Leu Gly Cys Thr Met Ala Pro Gly Ala Arg
20 25 30
Asn Val Phe Val Ser Pro Ile Asp Val Gly Cys Gln Pro Val Ala Glu
35 40 45
Ala Asn Ala Ala Ser Met Cys Leu Leu Ala Asn Val Ala His Ala Asn
50 55 60
Arg Val Arg Val Gly Ser Thr Pro Leu Gly Arg Pro Ser Leu Cys Leu
65 70 75 80
Pro Pro Thr Ser His Thr Ala Cys Pro Leu Pro Gly Thr Cys His Ile
85 90 95
Pro Gly Asn Ile Gly Ile Cys Gly Ala Tyr Gly Lys Asn Thr Leu Asn
100 105 110
Gly His Glu Lys Glu Thr Met Lys Phe Leu Asn Asp Arg Leu Ala Asn
115 120 125
Tyr Leu Glu Lys Val Arg Gln Leu Glu Gln Glu Asn Ala Glu Leu Glu
130 135 140
Thr Thr Leu Leu Glu Arg Ser Lys Cys His Glu Ser Thr Val Cys Pro
145 150 155 160
Asp Tyr Gln Ser Tyr Phe Arg Thr Ile Glu Glu Leu Gln Gln Lys Ile

165	170	175
Leu Cys Ser Lys Ala Glu Asn Ala Arg Leu Ile Val Gln Ile Asp Asn		
180	185	190
Ala Lys Leu Ala Ala Asp Asp Phe Arg Ile Lys Leu Glu Ser Glu Arg		
195	200	205
Ser Leu His Gln Leu Val Glu Ala Asp Lys Cys Gly Thr Gln Lys Leu		
210	215	220
Leu Asp Asp Ala Thr Leu Ala Lys Ala Asp Leu Glu Ala Gln Gln Glu		
225	230	235
Ser Leu Lys Glu Glu Gln Leu Ser Leu Lys Ser Asn His Glu Gln Glu		
245	250	255
Val Lys Ile Leu Arg Ser Gln Leu Gly Glu Lys Phe Arg Ile Glu Leu		
260	265	270
Asp Ile Glu Pro Thr Ile Asp Leu Asn Arg Val Leu Gly Glu Met Arg		
275	280	285
Ala Gln Tyr Glu Ala Met Val Glu Thr Asn His Gln Asp Val Glu Gln		
290	295	300
Trp Phe Gln Ala Gln Ser Glu Gly Ile Ser Leu Gln Ala Met Ser Cys		
305	310	315
Ser Glu Glu Leu Gln Cys Cys Gln Ser Glu Ile Leu Glu Leu Arg Cys		
325	330	335
Thr Val Asn Ala Leu Glu Val Glu Arg Gln Ala Gln His Thr Leu Lys		
340	345	350
Asp Cys Leu Gln Asn Ser Leu Cys Glu Ala Glu Asp Arg Tyr Gly Thr		
355	360	365
Glu Leu Ala Gln Met Gln Ser Leu Ile Ser Asn Leu Glu Glu Gln Leu		
370	375	380
Ser Glu Ile Arg Ala Asp Leu Glu Arg Gln Asn Gln Glu Tyr Gln Val		
385	390	395
Leu Leu Asp Val Lys Ala Arg Leu Glu Asn Glu Ile Ala Thr Tyr Arg		
405	410	415
Asn Leu Thr Pro Leu Gln Ser Leu Phe His Ala Cys Leu Leu Tyr Phe		
420	425	430
Leu Ser Lys Leu Trp Pro Cys His Arg Trp Val Ser Leu Trp Pro Trp		
435	440	445
Ser Gln His Gly Glu Met Ile Leu Lys Ala Arg Val Arg Arg Leu Arg		
450	455	460
Leu Val Ala Leu Gly Ser Gly Val Pro Ser Pro Cys Pro Val Phe Leu		
465	470	475
Gln Asp		480
482		

<210> 3659

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3659

Asp Leu Leu Gln Cys Leu Asn Gln Leu Tyr Ser Ala Ser Thr Glu Met	
1	5
Ser Cys Gln Gln Ser Gln Gln Gln Cys Gln Pro Pro Pro Lys Cys Thr	10
20	25
Pro Lys Cys Pro Pro Lys Cys Thr Pro Lys Cys Pro Pro Lys Cys Pro	30
35	40
Pro Lys Cys Pro Pro Gln Tyr Ser Ala Pro Cys Pro Pro Pro Val Ser	45
50	55
Ser Cys Cys Gly Ser Ser Gly Gly Cys Cys Ser Ser Glu Gly Gly	60
65	70
Gly Cys Cys Leu Ser His His Arg Pro Arg Gln Ser Leu Arg Arg Arg	75
85	90
Pro Gln Ser Ser Ser Cys Cys Gly Ser Gly Ser Gly Gln Gln Ser Gly	95

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<210> 3660
<211> 228
<212> PRT
<213> Homo sapiens
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<210> 3661
<211> 122
<212> PRT
<213> Homo sapiens
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5428

65					70					75				80	
Cys	Cys	Leu	Ser	His	His	Arg	His	His	Arg	Ser	His	Cys	His	Arg	Pro
				85					90					95	
Lys	Ser	Ser	Asn	Cys	Tyr	Gly	Ser	Gly	Ser	Gly	Gln	Gln	Ser	Gly	Gly
			100					105					110		
Ser	Gly	Cys	Cys	Ser	Gly	Gly	Gly	Cys	Cys						
		115					120		122						

<210> 3662

<211> 357

<212> PRT

<213> Homo sapiens

<400> 3662

Arg	Lys	Ser	Leu	Pro	His	Pro	Asn	Pro	Gln	Lys	Met	Leu	Lys	Lys	Pro
1				5					10					15	
Leu	Ser	Ala	Val	Thr	Trp	Leu	Cys	Ile	Phe	Ile	Val	Ala	Phe	Val	Ser
		20						25					30		
His	Pro	Ala	Trp	Leu	Gln	Lys	Leu	Ser	Lys	His	Lys	Thr	Pro	Ala	Gln
		35					40					45			
Pro	Gln	Leu	Lys	Ala	Ala	Asn	Cys	Cys	Glu	Glu	Val	Lys	Glu	Leu	Lys
		50				55					60				
Ala	Gln	Val	Ala	Asn	Leu	Ser	Ser	Leu	Leu	Ser	Glu	Leu	Asn	Lys	Lys
		65		70						75				80	
Gln	Glu	Arg	Asp	Trp	Val	Ser	Val	Val	Met	Gln	Val	Met	Glu	Leu	Glu
			85						90				95		
Ser	Asn	Ser	Lys	Arg	Met	Glu	Ser	Arg	Leu	Thr	Asp	Ala	Glu	Ser	Lys
			100					105					110		
Tyr	Ser	Glu	Met	Asn	Asn	Gln	Ile	Asp	Ile	Met	Gln	Leu	Gln	Ala	Ala
		115				120						125			
Gln	Thr	Val	Thr	Gln	Thr	Ser	Ala	Gly	Lys	Glu	Thr	Ser	Pro	Leu	Arg
		130				135					140				
Glu	Arg	Gly	Val	Pro	Pro	His	Leu	Gln	His	Cys	Phe	Tyr	Ile	Pro	Pro
				150						155				160	
Asp	Asp	Phe	Leu	Gly	Ser	Pro	Glu	Leu	Glu	Val	Phe	Cys	Asp	Met	Glu
			165						170					175	
Thr	Ser	Gly	Gly	Trp	Thr	Ile	Ile	Gln	Arg	Arg	Lys	Ser	Gly	Leu	
		180				185					190				
Val	Ser	Phe	Tyr	Arg	Asp	Trp	Lys	Gln	Tyr	Lys	Gln	Gly	Phe	Gly	Ser
		195				200					205				
Ile	Arg	Gly	Asp	Phe	Trp	Leu	Gly	Asn	Glu	His	Ile	His	Arg	Leu	Ser
		210				215					220				
Arg	Gln	Pro	Thr	Arg	Leu	Arg	Val	Glu	Met	Glu	Asp	Trp	Glu	Gly	Asn
				230						235				240	
Leu	Arg	Tyr	Ala	Glu	Tyr	Ser	His	Phe	Val	Leu	Gly	Asn	Glu	Leu	Asn
			245						250					255	
Ser	Tyr	Arg	Leu	Phe	Leu	Gly	Asn	Tyr	Thr	Gly	Asn	Val	Gly	Asn	Asp
			260				265						270		
Ala	Leu	Gln	Tyr	His	Asn	Asn	Thr	Ala	Phe	Ser	Thr	Lys	Asp	Lys	Asp
		275					280					285			
Asn	Asp	Asn	Cys	Leu	Asp	Lys	Cys	Ala	Gln	Leu	Arg	Lys	Gly	Gly	Tyr
		290				295					300				
Trp	Tyr	Asn	Cys	Cys	Thr	Asp	Ser	Asn	Leu	Asn	Gly	Val	Tyr	Tyr	Arg
		305			310					315				320	
Leu	Gly	Glu	His	Asn	Lys	His	Leu	Asp	Gly	Ile	Thr	Trp	Tyr	Gly	Trp
			325						330					335	
His	Gly	Ser	Thr	Tyr	Ser	Leu	Lys	Arg	Val	Glu	Met	Lys	Ile	Arg	Pro
			340					345					350		
Glu	Asp	Phe	Lys	Pro											
		355		357											

<210> 3663
 <211> 464
 <212> PRT
 <213> Homo sapiens

<400> 3663
 Leu Ser Ser Ala Lys Glu Thr Leu Ala Gln Met Tyr Asn Thr Val Trp
 1 5 10 15
 Asn Met Glu Asp Leu Asp Leu Glu Tyr Ala Lys Thr Asp Ile Asn Cys
 20 25 30
 Gly Thr Asp Leu Met Phe Tyr Ile Glu Met Asp Pro Pro Ala Leu Pro
 35 40 45
 Pro Lys Pro Pro Lys Pro Thr Thr Val Ala Asn Asn Gly Met Asn Asn
 50 55 60
 Asn Met Ser Leu Gln Asp Ala Glu Trp Tyr Trp Gly Asp Ile Ser Arg
 65 70 75 80
 Glu Glu Val Asn Glu Lys Leu Arg Asp Thr Ala Asp Gly Thr Phe Leu
 85 90 95
 Val Arg Asp Ala Ser Thr Lys Met His Gly Asp Tyr Thr Leu Thr Leu
 100 105 110
 Arg Lys Gly Gly Asn Asn Lys Leu Ile Lys Ile Phe His Arg Asp Gly
 115 120 125
 Lys Tyr Gly Phe Ser Asp Pro Leu Thr Phe Ser Ser Val Val Glu Leu
 130 135 140
 Ile Asn His Tyr Arg Asn Glu Ser Leu Ala Gln Tyr Asn Pro Lys Leu
 145 150 155 160
 Asp Val Lys Leu Leu Tyr Pro Val Ser Lys Tyr Gln Gln Asp Gln Val
 165 170 175
 Val Lys Glu Asp Asn Ile Glu Ala Val Gly Lys Lys Leu His Glu Tyr
 180 185 190
 Asn Thr Gln Phe Gln Glu Lys Ser Arg Glu Tyr Asp Arg Leu Tyr Glu
 195 200 205
 Glu Tyr Thr Arg Thr Ser Gln Glu Ile Gln Met Lys Arg Thr Ala Ile
 210 215 220
 Glu Ala Phe Asn Glu Thr Ile Lys Ile Phe Glu Glu Gln Cys Gln Thr
 225 230 235 240
 Gln Glu Arg Tyr Ser Lys Glu Tyr Ile Glu Lys Phe Lys Arg Glu Gly
 245 250 255
 Asn Glu Lys Glu Ile Gln Arg Ile Met His Asn Tyr Asp Lys Leu Lys
 260 265 270
 Ser Arg Ile Ser Glu Ile Ile Asp Ser Arg Arg Arg Leu Glu Glu Asp
 275 280 285
 Leu Lys Lys Gln Ala Ala Glu Tyr Arg Glu Ile Asp Lys Arg Met Asn
 290 295 300
 Ser Ile Lys Pro Asp Leu Ile Gln Leu Arg Lys Thr Arg Asp Gln Tyr
 305 310 315 320
 Leu Met Trp Leu Thr Gln Lys Gly Val Arg Gln Lys Lys Leu Asn Glu
 325 330 335
 Trp Leu Gly Asn Glu Asn Thr Glu Asp Gln Tyr Ser Leu Val Glu Asp
 340 345 350
 Asp Glu Asp Leu Pro His His Asp Glu Lys Thr Trp Asn Val Gly Ser
 355 360 365
 Ser Asn Arg Asn Lys Ala Glu Asn Leu Leu Arg Gly Lys Arg Asp Gly
 370 375 380
 Thr Phe Leu Val Arg Glu Ser Ser Lys Gln Gly Cys Tyr Ala Cys Ser
 385 390 395 400
 Val Val Val Asp Gly Glu Val Lys His Cys Val Ile Asn Lys Thr Ala
 405 410 415
 Thr Gly Tyr Gly Phe Ala Glu Pro Tyr Asn Leu Tyr Ser Ser Leu Lys
 420 425 430
 Glu Leu Val Leu His Tyr Gln His Thr Ser Leu Val Gln His Asn Asp

435 440 445
 Ser Leu Asn Val Thr Leu Ala Tyr Pro Val Tyr Ala Gln Gln Arg Arg
 450 455 460 464

<210> 3664
 <211> 179
 <212> PRT
 <213> Homo sapiens

<400> 3664
 Gly Ala Thr Val Glu Asp Gln Ser Cys Asn Phe Gly Ser Leu Arg Trp
 1 5 10 15
 Val Val Ser Val Pro His Ile Ser Ala Arg Ser Cys Pro Asp Pro Leu
 20 25 30
 Leu Ser Arg Thr Gly Arg Val Pro Gly Gly Arg Gly Ala Gly Leu Pro
 35 40 45
 Arg His His Ser Pro Arg Cys Cys Leu Gln Val Phe Phe Asn Gly Ala
 50 55 60
 Asn Val Arg Gln Val Asp Val Pro Thr Leu Thr Gly Ala Phe Gly Ile
 65 70 75 80
 Leu Ala Ala His Val Pro Thr Leu Gln Val Leu Arg Pro Gly Leu Val
 85 90 95
 Val Val His Ala Glu Asp Gly Thr Thr Ser Lys Tyr Phe Val Ser Ser
 100 105 110
 Gly Ser Ile Ala Val Asn Ala Asp Ser Ser Val Gln Leu Leu Ala Glu
 115 120 125
 Glu Ala Val Thr Leu Asp Met Leu Asp Leu Gly Ala Ala Lys Ala Asn
 130 135 140
 Leu Glu Lys Ala Gln Ala Glu Leu Val Gly Thr Ala Asp Glu Ala Thr
 145 150 155 160
 Arg Ala Glu Ile Gln Ile Arg Ile Glu Ala Asn Glu Ala Leu Val Lys
 165 170 175
 Ala Leu Glu
 179

<210> 3665
 <211> 430
 <212> PRT
 <213> Homo sapiens

<400> 3665
 Ala Ser Gln Leu Ala Phe Gly Gly Lys Leu Thr Ser Thr Pro Ser Arg
 1 5 10 15
 Asp Phe Gln Gly Cys Gly Arg Gly Ala Val Thr Cys Cys Ser Phe His
 20 25 30
 Glu His Arg His Gln Ser Gly Arg Cys Leu Ser Thr Gly Met Ala Pro
 35 40 45
 Asn Leu Lys Gly Arg Pro Arg Lys Lys Lys Pro Cys Pro Gln Arg Arg
 50 55 60
 Asp Ser Phe Ser Gly Val Lys Asp Ser Asn Asn Asn Ser Asp Gly Lys
 65 70 75 80
 Ala Val Ala Lys Val Lys Cys Glu Ala Arg Ser Ala Leu Thr Lys Pro
 85 90 95
 Lys Asn Asn His Asn Cys Lys Lys Val Ser Asn Glu Glu Lys Pro Lys
 100 105 110
 Val Ala Ile Gly Glu Glu Cys Arg Ala Asp Glu Gln Ala Phe Leu Val

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      115      120      125
Ala Leu Tyr Lys Tyr Met Lys Glu Arg Lys Thr Pro Ile Glu Arg Ile
130      135      140
Pro Tyr Leu Gly Phe Lys Gln Ile Asn Leu Trp Thr Met Phe Gln Ala
145      150      155      160
Ala Gln Lys Leu Gly Gly Tyr Glu Thr Ile Thr Ala Arg Arg Gln Trp
      165      170      175
Lys His Ile Tyr Asp Glu Leu Gly Gly Asn Pro Gly Ser Thr Ser Ala
      180      185      190
Ala Thr Cys Thr Arg Arg His Tyr Glu Arg Leu Ile Leu Pro Tyr Glu
      195      200      205
Arg Phe Ile Lys Gly Glu Glu Asp Lys Pro Leu Pro Pro Ile Lys Pro
210      215      220
Arg Lys Gln Glu Asn Ser Ser Gln Glu Asn Glu Asn Lys Thr Lys Val
225      230      235      240
Ser Gly Thr Lys Arg Ile Lys His Glu Ile Pro Lys Ser Lys Lys Glu
      245      250      255
Lys Glu Asn Ala Pro Lys Pro Gln Asp Ala Ala Glu Val Ser Ser Glu
      260      265      270
Gln Glu Lys Glu Gln Glu Thr Leu Ile Ser Gln Lys Ser Ile Pro Glu
      275      280      285
Pro Leu Pro Ala Ala Asp Met Lys Lys Lys Ile Glu Gly Tyr Gln Glu
      290      295      300
Phe Ser Ala Lys Pro Leu Ala Ser Arg Val Asp Pro Glu Lys Asp Asn
305      310      315      320
Glu Thr Asp Gln Gly Ser Asn Ser Glu Lys Val Ala Glu Glu Ala Gly
      325      330      335
Glu Lys Gly Pro Thr Pro Pro Leu Pro Ser Ala Pro Leu Ala Pro Glu
      340      345      350
Lys Asp Ser Ala Leu Val Pro Gly Ala Ser Lys Gln Pro Leu Thr Ser
      355      360      365
Pro Ser Ala Leu Val Asp Ser Lys Gln Glu Ser Lys Leu Cys Cys Phe
      370      375      380
Thr Glu Ser Pro Glu Ser Glu Pro Gln Glu Ala Ser Phe Pro Arg Leu
385      390      395      400
Pro His His Thr Gly His Arg Trp Gln Thr Arg Met Arg Arg Arg Met
      405      410      415
Thr Asn Cys Pro Pro Trp Gln Ile Thr Leu Pro Thr Ala Pro
      420      425      430

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<210> 3666

<211> 459

<212> PRT

<213> Homo sapiens

<400> 3666

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Leu Leu Gln Glu Met Cys Thr Lys Thr Ile Pro Val Leu Trp Gly Cys
1      5      10      15
Phe Leu Leu Trp Asn Leu Tyr Val Ser Ser Ser Gln Thr Ile Tyr Pro
      20      25      30
Gly Ile Lys Ala Arg Ile Thr Gln Arg Ala Leu Asp Tyr Gly Val Gln
      35      40      45
Ala Gly Met Lys Met Ile Glu Gln Met Leu Lys Glu Lys Lys Leu Pro
      50      55      60
Asp Leu Ser Gly Ser Glu Ser Leu Glu Phe Leu Lys Val Asp Tyr Val
      65      70      75      80
Asn Tyr Asn Phe Ser Asn Ile Lys Ile Ser Ala Phe Ser Phe Pro Asn
      85      90      95
Thr Ser Leu Ala Phe Val Pro Gly Val Gly Ile Lys Ala Leu Thr Asn
      100      105      110
His Gly Thr Ala Asn Ile Ser Thr Asp Trp Gly Phe Glu Ser Pro Leu

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MISSING AT THE TIME OF PUBLICATION

<210> 3668
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 3668
 Val Ala Gly Glu Ala Val Pro Phe Phe Pro Met Met Tyr Ser Glu Pro
 1 5 10 15
 Leu Lys Pro Ser Tyr Leu Ala Leu Val Leu Trp Tyr Phe Leu Leu Thr
 20 25 30
 Gly Tyr Cys Ile Thr Lys Pro Glu Val Ile Phe Lys Ile Glu Gln Gly
 35 40 45
 Glu Glu Pro Trp Ile Leu Glu Lys Gly Phe Pro Ser Gln Cys His Pro
 50 55 60
 Ala Lys Tyr Leu Trp Cys Leu His Asp
 65 70 73

<210> 3669
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 3669
 Phe Ser Gly Val Cys Phe Ala Gly Ile Ala Gly Ser Met Ala Thr Leu
 1 5 10 15
 Leu His Asp Ala Val Met Asn Pro Ala Glu Val Val Lys Gln Arg Leu
 20 25 30
 Gln Met Tyr Asn Ser Gln His Arg Ser Ala Ile Ser Cys Ile Arg Thr
 35 40 45
 Val Trp Arg Thr Glu Gly Leu Gly Ala Phe Tyr Arg Ser Tyr Thr Thr
 50 55 60
 Gln Leu Thr Met Asn Ile Pro Phe Gln Ser Ile His Phe Ile Thr Tyr
 65 70 75 80
 Glu Phe Leu Gln Glu Gln Val Asn Pro His Arg Thr Tyr Asn Pro Gln
 85 90 95
 Ser His Ile Ile Ser Gly Gly Leu Ala Gly Ala Leu Ala Ala Ala
 100 105 110
 Thr Thr Pro Leu Asp Val Cys Lys Thr Leu Leu Asn Thr Gln Glu Asn
 115 120 125
 Val Ala Leu Ser Leu Ala Asn Ile Ser Gly Arg Leu Ser Gly Met Ala
 130 135 140
 Asn Ala Phe Arg Thr Val Tyr Gln Leu Asn Gly Leu Ala Gly Tyr Phe
 145 150 155 160
 Lys Gly Ile Gln Ala Arg Val Ile Tyr Gln Met Pro Ser Thr Ala Ile
 165 170 175
 Ser Trp Ser Val Tyr Glu Phe Phe Lys Tyr Phe Leu Thr Lys Arg Gln
 180 185 190
 Leu Glu Asn Arg Ala Pro Tyr
 195 199

<210> 3670
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 3670
 Arg Asn Pro Cys Pro Leu Thr Phe Leu Pro Ser Thr Leu Met Val Leu

1 5 10 15
 Leu Leu Ser Leu Thr Phe Phe Ser Ala Leu Thr Phe His Ser Ile Cys
 20 25 30
 Gln Leu Arg Asn Thr Gly Val Glu Val Asp Ile Val Phe Gln Arg Val
 35 40 45
 Ser Phe Leu
 50 51

<210> 3671
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 3671
 Ile Leu Lys Val Ala Lys Lys Glu Arg Thr Met Ser Ser Leu Pro Val
 1 5 10 15
 Pro Tyr Lys Leu Pro Val Ser Leu Ser Val Gly Ser Cys Val Ile Ile
 20 25 30
 Lys Gly Thr Pro Ile His Ser Phe Ile Asn Asp Pro Gln Leu Gln Val
 35 40 45
 Asp Phe Tyr Thr Asp Met Asp Glu Asp Ser Asp Ile Ala Phe Arg Phe
 50 55 60
 Arg Val His Phe Gly Asn His Val Val Met Asn Arg Arg Glu Phe Gly
 65 70 75 80
 Ile Trp Met Leu Glu Glu Thr Thr Asp Tyr Val Pro Phe Glu Asp Gly
 85 90 95
 Lys Gln Phe Glu Leu Cys Ile Tyr Val His Tyr Asn Glu Tyr Glu Ile
 100 105 110
 Lys Val Asn Gly His Thr His Leu Arg Ala Leu Ser His Arg Ile Pro
 115 120 125
 Pro Ser Phe Val Glu Asp Gly Cys Lys Cys Pro Arg Arg Tyr Leu Pro
 130 135 140
 Trp Thr Ser Val Cys Val Cys Asn
 145 150 152

<210> 3672
 <211> 342
 <212> PRT
 <213> Homo sapiens

<400> 3672
 His Tyr Ala Lys Leu Gly Thr Arg Pro Arg Leu Lys Phe Met Ser Ser
 1 5 10 15
 Pro Ser Leu Ser Asp Leu Gly Lys Arg Glu Pro Ala Ala Ala Ala Asp
 20 25 30
 Glu Arg Gly Thr Gln Gln Arg Arg Ala Cys Ala Asn Ala Thr Trp Asn
 35 40 45
 Ser Ile His Asn Gly Val Ile Ala Val Phe Gln Arg Lys Gly Leu Pro
 50 55 60
 Asp Gln Glu Leu Phe Ser Leu Asn Glu Gly Val Arg Gln Leu Leu Lys
 65 70 75 80
 Thr Glu Leu Gly Ser Phe Phe Thr Glu Tyr Leu Gln Asn Gln Leu Leu
 85 90 95
 Thr Lys Gly Met Val Ile Leu Arg Asp Lys Ile Arg Phe Tyr Glu Gly
 100 105 110
 Gln Lys Leu Leu Asp Ser Leu Ala Glu Thr Trp Asp Phe Phe Phe Ser
 115 120 125
 Asp Val Leu Pro Met Leu Gln Ala Ile Phe Tyr Pro Val Gln Gly Lys

130	135	140
Glu Pro Ser Val Arg Gln Leu Ala Leu Leu His Phe Arg Asn Ala Ile		
145	150	155
Thr Leu Ser Val Lys Leu Glu Asp Ala Leu Ala Arg Ala His Ala Arg		160
	165	170
Val Pro Pro Ala Ile Val Gln Met Leu Leu Val Leu Gln Gly Val His		175
	180	185
Glu Ser Arg Gly Val Thr Glu Asp Tyr Leu Arg Leu Glu Thr Leu Val		190
	195	200
Gln Lys Val Val Ser Pro Tyr Leu Gly Thr Tyr Gly Leu His Ser Ser		205
	210	215
Glu Gly Pro Phe Thr His Ser Cys Ile Leu Glu Lys Arg Leu Leu Arg		220
225	230	235
Arg Ser Arg Ser Gly Asp Val Leu Ala Lys Asn Pro Val Val Arg Ser		240
	245	250
Lys Ser Tyr Asn Thr Pro Leu Leu Asn Pro Val Gln Glu His Glu Ala		255
	260	265
Glu Gly Ala Ala Ala Gly Gly Thr Ser Ile Arg Arg His Ser Val Ser		270
	275	280
Glu Met Thr Ser Cys Pro Glu Pro Gln Gly Phe Ser Asp Pro Pro Gly		285
	290	295
Gln Gly Pro Thr Gly Thr Phe Arg Ser Ser Pro Ala Pro His Ser Gly		300
305	310	315
Pro Cys Pro Ser Arg Leu Tyr Pro Thr Thr Gln Pro Pro Glu Gln Gly		320
	325	330
Leu Asp Pro Thr Arg Ser		335
	340	342

<210> 3673

<211> 236

<212> PRT

<213> Homo sapiens

<400> 3673

Arg Pro Pro Arg Val Trp Tyr Pro Glu Leu Arg Glu Leu Ser Ala Ala		
1	5	10
Ala Pro Arg Trp Ser His Arg Thr Ala Pro Gly Ile Met Val Phe Tyr		15
	20	25
Phe Thr Ser Ser Ser Val Asn Ser Ser Ala Tyr Thr Ile Tyr Met Gly		30
	35	40
Lys Asp Lys Tyr Glu Asn Glu Asp Leu Ile Lys His Gly Trp Pro Glu		45
	50	55
Asp Ile Trp Phe His Val Asp Lys Leu Ser Ser Ala His Val Tyr Leu		60
	65	70
Arg Leu His Lys Gly Glu Asn Ile Glu Asp Ile Pro Lys Glu Val Leu		75
	85	90
Met Asp Cys Ala His Leu Val Lys Ala Asn Ser Ile Gln Gly Cys Lys		95
	100	105
Met Asn Asn Val Asn Val Val Tyr Thr Pro Trp Ser Asn Leu Lys Lys		110
	115	120
Thr Ala Asp Met Asp Val Gly Gln Ile Gly Phe His Arg Gln Lys Asp		125
	130	135
Val Lys Ile Val Thr Val Glu Lys Lys Val Asn Glu Ile Leu Asn Arg		140
145	150	155
Leu Glu Lys Thr Lys Val Glu Arg Phe Pro Asp Leu Ala Ala Glu Lys		160
	165	170
Glu Cys Arg Asp Arg Glu Glu Arg Asn Glu Lys Lys Ala Gln Ile Gln		175
	180	185
Glu Met Lys Lys Arg Glu Lys Glu Met Lys Lys Lys Arg Glu Met		190
	195	200
Asp Glu Leu Arg Ser Tyr Ser Ser Leu Met Lys Val Glu Asn Met Ser		205

210 215 220
 Ser Asn Gln Asp Gly Asn Asp Ser Asp Glu Phe Met
 225 230 235 236

<210> 3674
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 3674
 Arg Pro Pro Arg Val Trp Tyr Pro Glu Leu Arg Glu Leu Ser Ala Ala
 1 5 10 15
 Ala Pro Arg Trp Ser His Arg Thr Ala Pro Gly Ile Met Val Phe Tyr
 20 25 30
 Phe Thr Ser Ser Val Asn Ser Ser Ala Tyr Thr Ile Tyr Met Gly
 35 40 45
 Lys Asp Lys Tyr Glu Asn Glu Asp Leu Ile Lys His Gly Trp Pro Glu
 50 55 60
 Asp Ile Trp Phe His Val Asp Lys Leu Ser Ser Ala His Val Tyr Leu
 65 70 75 80
 Arg Leu His Lys Gly Glu Asn Ile Glu Asp Ile Pro Lys Glu Val Leu
 85 90 95
 Met Asp Cys Ala His Leu Val Lys Ala Asn Ser Ile Gln Gly Cys Lys
 100 105 110
 Met Asn Asn Val Asn Val Val Tyr Thr Pro Trp Ser Asn Leu Lys Lys
 115 120 125
 Thr Ala Asp Met Asp Val Gly Gln Ile Gly Phe His Arg Gln Lys Asp
 130 135 140
 Val Lys Ile Val Thr Val Glu Lys Lys Val Asn Glu Ile Leu Asn Arg
 145 150 155 160
 Leu Glu Lys Thr Lys Val Glu Arg Phe Pro Asp Leu Ala Ala Glu Lys
 165 170 175
 Glu Cys Arg Asp Arg Glu Glu Arg Asn Glu Lys Lys Ala Gln Ile Gln
 180 185 190
 Glu Met Lys Lys Arg Glu Lys Glu Glu Met Lys Lys Lys Arg Glu Met
 195 200 205
 Asp Glu Leu Arg Ser Tyr Ser Ser Leu Met Lys Val Glu Asn Met Ser
 210 215 220
 Ser Asn Gln Asp Gly Asn Asp Ser Asp Glu Phe Met
 225 230 235 236

<210> 3675
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 3675
 Val Thr Leu Ala Lys Met Arg Val His Ile Ser Ser Cys Leu Lys Val
 1 5 10 15
 Gln Glu Gln Met Ala Asn Cys Pro Lys Phe Val Pro Val Val Pro Thr
 20 25 30
 Ser Gln Pro Ile Pro Ser Asn Ile Pro Asn Arg Ser Thr Phe Ala Cys
 35 40 45
 Pro Tyr Cys Gly Ala Arg Asn Leu Asp Gln Gln Glu Leu Val Lys His
 50 55 60
 Cys Val Glu Ser His Arg Ser Asp Pro Asn Arg Val Val Cys Pro Ile
 65 70 75 80
 Cys Ser Ala Met Pro Trp Gly Asp Pro Ser Tyr Lys Ser Ala Asn Phe

				85					90					95			
Leu	Gln	His	Leu	Leu	His	Arg	His	Lys	Phe	Ser	Tyr	Asp	Thr	Phe	Val		
			100					105						110			
Asp	Tyr	Ser	Ile	Asp	Glu	Glu	Ala	Ala	Phe	Gln	Ala	Ala	Leu	Ala	Leu		
			115				120					125					
Ser	Leu	Ser	Glu	Asn													
	130			133													

<210> 3676

<211> 617

<212> PRT

<213> Homo sapiens

<400> 3676

Thr	Leu	Gly	Arg	Trp	Leu	Leu	Gly	Val	Tyr	Glu	Thr	Val	Ala	Pro	Thr		
1				5					10					15			
Leu	Ala	Cys	Leu	Pro	Arg	Pro	Arg	Leu	Arg	Arg	Arg	Arg	Arg	Arg	Arg		
			20					25					30				
Arg	Arg	Arg	Met	Ile	Ser	Arg	Tyr	Thr	Arg	Lys	Ala	Val	Pro	Gln	Ser		
			35				40					45					
Leu	Glu	Leu	Lys	Gly	Ile	Thr	Lys	His	Ala	Leu	Asn	His	His	Pro	Pro		
	50				55						60						
Pro	Glu	Lys	Leu	Glu	Glu	Ile	Ser	Pro	Thr	Ser	Asp	Ser	His	Glu	Lys		
	65				70					75				80			
Asp	Thr	Ser	Ser	Gln	Ser	Lys	Ser	Asp	Ile	Thr	Arg	Glu	Ser	Ser	Phe		
				85				90						95			
Thr	Ser	Ala	Asp	Thr	Gly	Asn	Ser	Leu	Ser	Ala	Phe	Pro	Ser	Tyr	Thr		
			100					105					110				
Gly	Ala	Gly	Ile	Ser	Thr	Glu	Gly	Ser	Ser	Asp	Phe	Ser	Trp	Gly	Tyr		
			115				120					125					
Gly	Glu	Leu	Asp	Gln	Asn	Ala	Thr	Glu	Lys	Val	Gln	Thr	Met	Phe	Thr		
	130				135					140							
Ala	Ile	Asp	Glu	Leu	Leu	Tyr	Glu	Gln	Lys	Leu	Ser	Val	His	Thr	Lys		
	145				150					155				160			
Ser	Leu	Gln	Glu	Glu	Cys	Gln	Gln	Trp	Thr	Ala	Ser	Phe	Pro	His	Leu		
				165				170						175			
Arg	Ile	Leu	Gly	Arg	Gln	Ile	Ile	Thr	Pro	Ser	Glu	Gly	Tyr	Arg	Leu		
			180					185					190				
Tyr	Pro	Arg	Ser	Pro	Ser	Ala	Val	Ser	Ala	Ser	Tyr	Glu	Thr	Thr	Leu		
	195				200							205					
Ser	Gln	Glu	Arg	Asp	Ser	Thr	Ile	Phe	Gly	Ile	Arg	Gly	Lys	Lys	Leu		
	210				215						220						
His	Phe	Ser	Ser	Ser	Tyr	Ala	His	Lys	Ala	Ser	Ser	Ile	Ala	Lys	Ser		
	225				230					235				240			
Ser	Ser	Phe	Cys	Ser	Met	Glu	Arg	Asp	Glu	Glu	Asp	Ser	Ile	Ile	Val		
				245				250					255				
Ser	Glu	Gly	Ile	Ile	Glu	Glu	Tyr	Leu	Ala	Phe	Asp	His	Ile	Asp	Ile		
			260					265				270					
Glu	Glu	Gly	Phe	His	Gly	Lys	Lys	Ser	Glu	Ala	Ala	Thr	Glu	Lys	Gln		
	275					280						285					
Lys	Leu	Gly	Tyr	Pro	Pro	Ile	Ala	Pro	Phe	Tyr	Cys	Met	Lys	Glu	Asp		
	290				295						300						
Val	Leu	Ala	Tyr	Val	Phe	Asp	Ser	Val	Trp	Cys	Lys	Val	Val	Ser	Cys		
	305				310					315				320			
Met	Glu	Gln	Leu	Thr	Arg	Ser	His	Trp	Glu	Gly	Phe	Ala	Ser	Asp	Asp		
			325					330					335				
Glu	Ser	Asn	Val	Ala	Val	Thr	Arg	Pro	Asp	Ser	Glu	Ser	Ser	Cys	Val		
			340					345				350					
Leu	Ser	Glu	Leu	His	Pro	Leu	Val	Leu	Pro	Arg	Val	Pro	Gln	Ser	Lys		
	355					360						365					
Val	Leu	Tyr	Ile	Thr	Ser	Asn	Pro	Met	Ser	Leu	Cys	Gln	Ala	Ser	Arg		

370	375	380
His Gln Pro Asn Val	Asn Asp Leu Leu Val	His Gly Met Pro Leu Gln
385	390	395
Pro Arg Asn Leu Ser	Leu Met Asp Lys Leu Leu Asp Leu Asp Asp Lys	400
405	410	415
Leu Leu Met Arg Pro	Gly Ser Ser Thr Ile Leu Ser Thr Arg Asn Trp	420
420	425	430
Pro Asn Arg Ala Val	Glu Phe Ser Thr Ser Ser Leu Ser Tyr Thr Val	435
435	440	445
Gln Ser Thr Arg Arg	Arg Asn Pro Pro Pro Arg Thr Leu His Pro Ile	450
450	455	460
Ser Thr Ser His Ser	Cys Ala Glu Thr Pro Arg Ser Val Glu Glu Ile	465
465	470	475
Leu Arg Gly Ala Arg	Val Pro Val Ala Pro Asp Ser Leu Ser Ser Pro	480
485	490	495
Ser Pro Thr Pro Leu	Ser Arg Asn Asn Leu Leu Pro Pro Ile Gly Thr	500
500	505	510
Ala Glu Val Glu His	Val Ser Thr Val Gly Pro Gln Arg Gln Met Lys	515
515	520	525
Pro His Gly Asp Ser	Ser Arg Ala Gln Ser Ala Val Val Asp Glu Pro	530
530	535	540
Asn Tyr Gln Gln Pro	Gln Glu Arg Leu Leu Leu Pro Asp Phe Phe Pro	545
545	550	555
Arg Pro Asn Thr Thr	Gln Ser Phe Leu Leu Asp Thr Gln Tyr Arg Arg	560
565	570	575
Ser Cys Ala Val Glu	Tyr Pro His Gln Ala Arg Pro Gly Arg Gly Ser	580
580	585	590
Ala Gly Pro Gln Leu	His Gly Ser Thr Lys Ser Gln Ser Gly Gly Arg	595
595	600	605
Pro Val Ser Arg Thr	Arg Gln Gly Pro	610
610	615	617

<210> 3677
 <211> 170
 <212> PRT
 <213> Homo sapiens

<400> 3677

Met Arg Leu Gln Gly	Ala Ile Phe Val Leu Leu Pro His Leu Gly Pro
1	5 10 15
Ile Leu Val Trp Leu	Phe Thr Arg Asp His Met Ser Gly Trp Cys Glu
20	25 30
Gly Pro Arg Met Leu	Ser Trp Cys Pro Phe Tyr Lys Val Leu Leu Leu
35	40 45
Val Gln Thr Ala Ile	Tyr Ser Val Val Gly Tyr Ala Ser Tyr Leu Val
50	55 60
Trp Lys Asp Leu Gly	Gly Gly Leu Gly Trp Pro Leu Ala Leu Pro Leu
65	70 75 80
Gly Leu Tyr Ala Val	Gln Leu Thr Ile Ser Trp Thr Val Leu Val Leu
85	90 95
Phe Phe Thr Val His	Asn Pro Gly Leu Ala Leu Leu His Leu Leu Leu
100	105 110
Leu Tyr Gly Leu Val	Val Ser Thr Ala Leu Ile Trp His Pro Ile Asn
115	120 125
Lys Leu Ala Ala Leu	Leu Leu Leu Pro Tyr Leu Ala Trp Leu Thr Val
130	135 140
Thr Ser Ala Leu Thr	Tyr His Leu Trp Arg Asp Ser Leu Cys Pro Val
145	150 155 160
His Gln Pro Gln Pro	Thr Glu Lys Ser Asp
165	170

<210> 3678

<211> 496

<212> PRT

<213> Homo sapiens

<400> 3678

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Arg Gly Lys Ala Glu Phe Phe Leu Ala Met Ala Gly Thr Asn Ala Leu
 1          5          10          15
Leu Met Leu Glu Asn Phe Ile Asp Gly Lys Phe Leu Pro Cys Ser Ser
          20          25          30
Tyr Ile Asp Ser Tyr Asp Pro Ser Thr Gly Glu Val Tyr Cys Arg Val
          35          40          45
Pro Asn Ser Gly Lys Asp Glu Ile Glu Ala Ala Val Lys Ala Ala Arg
          50          55          60
Glu Ala Phe Pro Ser Trp Ser Ser Arg Ser Pro Gln Glu Arg Ser Arg
          65          70          75          80
Val Leu Asn Gln Val Ala Asp Leu Leu Glu Gln Ser Leu Glu Glu Phe
          85          90          95
Ala Gln Ala Glu Ser Lys Asp Gln Gly Lys Thr Leu Ala Leu Ala Arg
          100          105          110
Thr Met Asp Ile Pro Arg Ser Val Gln Asn Phe Arg Phe Phe Ala Ser
          115          120          125
Ser Ser Leu His His Thr Ser Glu Cys Thr Gln Met Asp His Leu Gly
          130          135          140
Cys Met His Tyr Thr Val Arg Ala Pro Val Gly Val Ala Gly Leu Ile
          145          150          155          160
Ser Pro Trp Asn Leu Pro Leu Tyr Leu Leu Thr Trp Lys Ile Ala Pro
          165          170          175
Ala Met Ala Ala Gly Asn Thr Val Ile Ala Lys Pro Ser Glu Leu Thr
          180          185          190
Ser Val Thr Ala Trp Met Leu Cys Lys Leu Leu Asp Lys Ala Gly Val
          195          200          205
Pro Pro Gly Val Val Asn Ile Val Phe Gly Thr Gly Pro Arg Val Gly
          210          215          220
Glu Ala Leu Val Ser His Pro Glu Val Pro Leu Ile Ser Phe Thr Gly
          225          230          235          240
Ser Gln Pro Thr Ala Glu Arg Ile Thr Gln Leu Ser Ala Pro His Cys
          245          250          255
Lys Lys Leu Ser Leu Glu Leu Gly Gly Lys Asn Pro Ala Ile Ile Phe
          260          265          270
Glu Asp Ala Asn Leu Asp Glu Cys Ile Pro Ala Thr Val Arg Ser Ser
          275          280          285
Phe Ala Asn Gln Gly Glu Ile Cys Leu Cys Thr Ser Arg Ile Phe Val
          290          295          300
Gln Lys Ser Ile Tyr Ser Glu Phe Leu Lys Arg Phe Val Glu Ala Thr
          305          310          315          320
Arg Lys Trp Lys Val Gly Ile Pro Ser Asp Pro Leu Val Ser Ile Gly
          325          330          335
Ala Leu Ile Ser Lys Ala His Leu Glu Lys Val Arg Ser Tyr Val Lys
          340          345          350
Arg Ala Leu Ala Glu Gly Ala Gln Ile Trp Cys Gly Glu Gly Val Asp
          355          360          365
Lys Leu Ser Leu Pro Ala Arg Asn Gln Ala Gly Tyr Phe Met Leu Pro
          370          375          380
Thr Val Ile Thr Asp Ile Lys Asp Glu Ser Cys Cys Met Thr Glu Glu
          385          390          395          400
Ile Phe Gly Pro Val Thr Cys Val Val Pro Phe Asp Ser Glu Glu Glu
          405          410          415
Val Ile Glu Arg Ala Asn Asn Val Lys Tyr Gly Leu Ala Ala Thr Val
          420          425          430
Trp Ser Ser Asn Val Gly Arg Val His Arg Val Ala Lys Lys Leu Gln

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435	440	445
Ser Gly Leu Val Trp Thr Asn Cys Trp Leu Ile Arg Glu Leu Asn Leu		
450	455	460
Pro Phe Gly Gly Met Lys Ser Ser Gly Ile Gly Arg Glu Gly Ala Lys		
465	470	475
Asp Ser Tyr Asp Phe Phe Thr Glu Ile Lys Thr Ile Thr Val Lys His		
485	490	495 496

<210> 3679
 <211> 453
 <212> PRT
 <213> Homo sapiens

<400> 3679

Met Ala Gly Thr Lys Pro Tyr Met Glu Ile Gln Thr Thr Ile Arg Glu		
1	5	10 15
Tyr Tyr Glu His Leu Tyr Ala Asn Lys Leu Glu Asn Leu Glu Glu Met		
	20	25 30
Asp Lys Phe Leu Asp Thr Tyr Thr Leu Pro Arg Leu Asn Gln Glu Glu		
	35	40 45
Val Glu Ser Leu Asn Arg Pro Ile Thr Gly Ser Glu Ile Glu Ala Ile		
	50	55 60
Ile Asn Ser Leu Pro Thr Lys Lys Ile Pro Gly Pro Asp Arg Phe Thr		
	65	70 75 80
Ala Lys Phe Tyr Gln Arg Tyr Lys Glu Glu Leu Ser Asn Leu Ile His		
	85	90 95
Tyr Leu Gly Leu Ser His His Leu Leu Ala Leu Asn Phe Ile Ile Val		
	100	105 110
Ser Phe Gly Lys Lys Ser Ala Trp Ser Ser Ala Gln Val Lys Val Thr		
	115	120 125
Asp Thr Asp Phe Asp Gly Val Glu Val Arg Val Phe Glu Gly Pro Pro		
	130	135 140
Lys Pro Glu Glu Pro Leu Lys Arg Ser Val Val Tyr Ile His Gly Gly		
	145	150 155 160
Gly Trp Ala Leu Ala Ser Ala Lys Ile Arg Tyr Tyr Asp Glu Leu Cys		
	165	170 175
Thr Ala Met Ala Glu Glu Leu Asn Ala Val Ile Val Ser Ile Glu Tyr		
	180	185 190
Arg Leu Val Pro Lys Val Tyr Phe Pro Glu Gln Ile His Asp Val Val		
	195	200 205
Arg Ala Thr Lys Tyr Phe Leu Lys Pro Glu Val Leu Gln Lys Tyr Met		
	210	215 220
Val Asp Pro Gly Arg Ile Cys Ile Ser Gly Asp Ser Ala Gly Gly Asn		
	225	230 235 240
Leu Ala Ala Ala Leu Gly Gln Gln Phe Thr Gln Asp Ala Ser Leu Lys		
	245	250 255
Asn Lys Leu Lys Leu Gln Ala Leu Ile Tyr Pro Val Leu Gln Ala Leu		
	260	265 270
Asp Phe Asn Thr Pro Ser Tyr Gln Gln Asn Val Asn Thr Pro Ile Leu		
	275	280 285
Pro Arg Tyr Val Met Val Lys Tyr Trp Val Asp Tyr Phe Lys Gly Asn		
	290	295 300
Tyr Asp Phe Val Gln Ala Met Ile Val Asn Asn His Thr Ser Leu Asp		
	305	310 315 320
Val Glu Glu Ala Ala Val Arg Ala Arg Leu Asn Trp Thr Ser Leu		
	325	330 335
Leu Pro Ala Ser Phe Thr Lys Asn Tyr Lys Pro Val Val Gln Thr Thr		
	340	345 350
Gly Asn Ala Arg Ile Val Gln Glu Leu Pro Gln Leu Leu Asp Ala Arg		

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      355      360      365
Ser Ala Pro Leu Ile Ala Asp Gln Ala Val Leu Gln Leu Leu Pro Lys
 370      375      380
Thr Tyr Ile Leu Thr Cys Glu His Asp Val Leu Arg Asp Asp Gly Ile
385      390      395      400
Met Tyr Ala Lys Arg Leu Glu Ser Ala Gly Val Glu Val Thr Leu Asp
      405      410      415
His Phe Glu Asp Gly Phe His Gly Cys Met Ile Phe Thr Ser Trp Pro
      420      425      430
Thr Asn Phe Ser Val Gly Ile Arg Thr Arg Asn Ser Tyr Ile Lys Trp
      435      440      445
Leu Asp Gln Asn Leu
450      453

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<210> 3680
<211> 632
<212> PRT
<213> Homo sapiens

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<400> 3680
Arg Ser Trp Gly Ala Pro Trp Phe Trp Arg Met Arg Leu Leu Arg Arg
 1      5      10      15
Arg His Met Pro Leu Arg Leu Ala Met Val Gly Cys Ala Phe Val Leu
      20      25      30
Phe Leu Phe Leu Leu His Arg Asp Val Ser Ser Arg Glu Glu Ala Thr
      35      40      45
Glu Lys Pro Trp Leu Lys Ser Leu Val Ser Arg Lys Asp His Val Leu
      50      55      60
Asp Leu Met Leu Glu Ala Met Asn Asn Leu Arg Asp Ser Met Pro Lys
      65      70      75      80
Leu Gln Ile Arg Ala Pro Glu Ala Gln Gln Thr Leu Phe Ser Ile Asn
      85      90      95
Gln Ser Cys Leu Pro Gly Phe Tyr Thr Pro Ala Glu Leu Lys Pro Phe
      100      105      110
Trp Glu Arg Pro Pro Gln Asp Pro Asn Ala Pro Gly Ala Asp Gly Lys
      115      120      125
Ala Phe Gln Lys Ser Lys Trp Thr Pro Leu Glu Thr Gln Glu Lys Glu
      130      135      140
Glu Gly Tyr Lys Lys His Cys Phe Asn Ala Phe Ala Ser Asp Arg Ile
      145      150      155      160
Ser Leu Gln Arg Ser Leu Gly Pro Asp Thr Arg Pro Pro Glu Cys Val
      165      170      175
Asp Gln Lys Phe Arg Arg Cys Pro Pro Leu Ala Thr Thr Ser Val Ile
      180      185      190
Ile Val Phe His Asn Glu Ala Trp Ser Thr Leu Leu Arg Thr Val Tyr
      195      200      205
Ser Val Leu His Thr Thr Pro Ala Ile Leu Leu Lys Glu Ile Ile Leu
      210      215      220
Val Asp Asp Ala Ser Thr Glu Glu His Leu Lys Glu Lys Leu Glu Gln
      225      230      235      240
Tyr Val Lys Gln Leu Gln Val Val Arg Val Val Arg Gln Glu Glu Arg
      245      250      255
Lys Gly Leu Ile Thr Ala Arg Leu Leu Gly Ala Ser Val Ala Gln Ala
      260      265      270
Glu Val Leu Thr Phe Leu Asp Ala His Cys Glu Cys Phe His Gly Trp
      275      280      285
Leu Glu Pro Leu Leu Ala Arg Ile Ala Glu Asp Lys Thr Val Val Val
      290      295      300
Ser Pro Asp Ile Val Thr Ile Asp Leu Asn Thr Phe Glu Phe Ala Lys
      305      310      315      320
Pro Val Gln Arg Gly Arg Val His Ser Arg Gly Asn Phe Asp Trp Ser

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      325      330      335
Leu Thr Phe Gly Trp Glu Thr Leu Pro Pro His Glu Lys Gln Arg Arg
      340      345      350
Lys Asp Glu Thr Tyr Pro Ile Lys Ser Pro Thr Phe Ala Gly Gly Leu
      355      360      365
Phe Ser Ile Ser Lys Ser Tyr Phe Glu His Ile Gly Thr Tyr Asp Asn
      370      375      380
Gln Met Glu Ile Trp Gly Gly Glu Asn Val Glu Met Ser Phe Arg Val
      385      390      395      400
Trp Gln Cys Gly Gly Gln Leu Glu Ile Ile Pro Cys Ser Val Val Gly
      405      410      415
His Val Phe Arg Thr Lys Ser Pro His Thr Phe Pro Lys Gly Thr Ser
      420      425      430
Val Ile Ala Arg Asn Gln Val Arg Leu Ala Glu Val Trp Met Asp Ser
      435      440      445
Tyr Lys Lys Ile Phe Tyr Arg Arg Asn Leu Gln Ala Ala Lys Met Ala
      450      455      460
Gln Glu Lys Ser Phe Gly Asp Ile Ser Glu Arg Leu Gln Leu Arg Glu
      465      470      475      480
Gln Leu His Cys His Asn Phe Ser Trp Tyr Leu His Asn Val Tyr Pro
      485      490      495
Glu Met Phe Val Pro Asp Leu Thr Pro Thr Phe Tyr Gly Ala Ile Lys
      500      505      510
Asn Leu Gly Thr Asn Gln Cys Leu Asp Val Gly Glu Asn Asn Arg Gly
      515      520      525
Gly Lys Pro Leu Ile Met Tyr Ser Cys His Gly Leu Gly Gly Asn Gln
      530      535      540
Tyr Phe Glu Tyr Thr Thr Gln Arg Asp Leu Arg His Asn Ile Ala Lys
      545      550      555      560
Gln Leu Cys Leu His Val Ser Lys Gly Ala Leu Gly Leu Gly Ser Cys
      565      570      575
His Phe Thr Gly Lys Asn Ser Gln Val Pro Lys Asp Glu Glu Trp Glu
      580      585      590
Leu Ala Gln Asp Gln Leu Ile Arg Asn Ser Gly Ser Gly Thr Cys Leu
      595      600      605
Thr Ser Gln Asp Lys Lys Pro Ala Met Ala Pro Cys Asn Pro Ser Asp
      610      615      620
Pro His Gln Leu Trp Leu Phe Val
      625      630      632

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<210> 3681
 <211> 370
 <212> PRT
 <213> Homo sapiens

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      <400> 3681
Leu Lys Asp Thr Leu Lys Ser Gln Met Thr Gln Glu Ala Ser Asp Glu
  1      5      10      15
Ala Glu Asp Met Lys Glu Ala Met Asn Arg Met Ile Asp Glu Leu Asn
      20      25      30
Lys Gln Val Ser Glu Leu Ser Gln Leu Tyr Lys Glu Ala Gln Ala Glu
      35      40      45
Leu Glu Asp Tyr Arg Lys Arg Lys Ser Leu Glu Asp Val Thr Ala Glu
      50      55      60
Tyr Ile His Lys Ala Glu His Glu Lys Leu Met Gln Leu Thr Asn Val
      65      70      75      80
Ser Arg Ala Lys Ala Glu Asp Ala Leu Ser Glu Met Lys Ser Gln Tyr
      85      90      95
Ser Lys Val Leu Asn Glu Leu Thr Gln Leu Lys Gln Leu Val Asp Ala
      100      105      110
Gln Lys Glu Asn Ser Val Ser Ile Thr Glu His Leu Gln Val Ile Thr

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      115      120      125
Thr Leu Arg Thr Ala Ala Lys Glu Met Glu Glu Lys Ile Ser Asn Leu
  130      135      140
Lys Glu His Leu Ala Ser Lys Glu Val Glu Val Ala Lys Leu Glu Lys
  145      150      155      160
Gln Leu Leu Glu Glu Lys Ala Ala Met Thr Asp Ala Met Val Pro Arg
      165      170      175
Ser Ser Tyr Glu Lys Leu Gln Ser Ser Leu Glu Ser Glu Val Ser Val
      180      185      190
Leu Ala Ser Lys Leu Lys Glu Ser Val Lys Glu Lys Glu Lys Val His
      195      200      205
Ser Glu Val Val Gln Ile Arg Ser Glu Val Ser Gln Val Lys Arg Glu
      210      215      220
Lys Glu Asn Ile Gln Thr Leu Leu Lys Ser Lys Glu Gln Glu Val Asn
  225      230      235      240
Glu Leu Leu Gln Lys Phe Gln Gln Ala Gln Glu Glu Leu Ala Glu Met
      245      250      255
Lys Arg Tyr Ser Glu Ser Ser Ser Lys Leu Glu Glu Asp Lys Asp Lys
      260      265      270
Lys Ile Asn Glu Met Ser Lys Glu Val Thr Lys Leu Lys Glu Ala Leu
      275      280      285
Asn Ser Leu Ser Gln Leu Ser Tyr Ser Thr Ser Ser Ser Lys Arg Gln
      290      295      300
Ser Gln Gln Leu Glu Ala Leu Gln Gln Gln Val Lys Gln Leu Gln Asn
  305      310      315      320
Gln Leu Ala Glu Cys Lys Lys Gln His Gln Glu Val Ile Ser Val Tyr
      325      330      335
Arg Met His Leu Leu Tyr Ala Val Gln Gly Gln Met Asp Glu Asp Val
      340      345      350
Gln Lys Val Leu Lys Gln Ile Leu Thr Met Cys Lys Asn Gln Ser Gln
      355      360      365
Lys Lys
  370

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<210> 3682

<211> 193

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(192)

<223> Xaa = any amino acid or nothing

<400> 3682

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Ala Gln Ala Leu Thr Ala Gly Arg Gln Leu Ala Leu Ala Ala Pro Phe
  1      5      10      15
Ile Ala Pro Ile Ser Pro Ile Ser Leu Pro Arg Leu Asn Pro Pro Ser
      20      25      30
Gln Ser Trp Asn Ser Thr Pro Phe Lys Val Lys Leu Pro Pro Gln
      35      40      45
Lys Glu Val Ile Thr Ser Asp Glu Leu Met Ala His Leu Gly Asn Cys
      50      55      60
Leu Leu Ser Ile Lys Pro Gln Glu Lys Ser Glu Gly Leu Gln Leu Asn
      65      70      75      80
Phe Gln Gln Asn Val Asp Asp Ala Met Thr Val Leu Pro Lys Leu Ala
      85      90      95
Thr Gly Leu Asp Val Asn Val Arg Phe Thr Gly Val Ser Asp Phe Glu
      100      105      110
Tyr Thr Pro Glu Cys Ser Val Phe Asp Leu Leu Gly Ile Pro Leu Tyr
      115      120      125
His Gly Trp Leu Val Asp Pro Gln Gln Ser Pro Glu Ala Val Arg Ala

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130	135	140
Val Gly Lys Leu Ser Tyr Asn Gln Leu Val Gly Glu Asp His His Leu		
145	150	155
Gln Thr Leu Gln Xaa His Gln Pro Arg Asp Arg Lys Pro Asp Cys Arg		160
	165	170
Ala Val Pro Gly Asp His Arg Gly Pro Ser Asp Leu Pro Arg Thr Val		175
	180	185
		190
		192

<210> 3683

<211> 313

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(312)

<223> Xaa = any amino acid or nothing

<400> 3683

Leu	Glu	Ile	Lys	Gln	Glu	Glu	Lys	Phe	Val	Gly	Gln	Cys	Ile	Lys	Glu
1				5					10					15	
Glu	Leu	Met	His	Gly	Glu	Cys	Val	Lys	Glu	Glu	Lys	Asp	Phe	Leu	Lys
			20					25					30		
Lys	Glu	Ile	Val	Asp	Asp	Thr	Lys	Val	Lys	Glu	Glu	Pro	Pro	Ile	Asn
			35				40					45			
His	Pro	Val	Gly	Cys	Lys	Arg	Lys	Leu	Ala	Met	Ser	Arg	Cys	Glu	Thr
			50				55				60				
Cys	Gly	Thr	Glu	Glu	Ala	Lys	Tyr	Arg	Cys	Pro	Arg	Cys	Met	Arg	Tyr
			65			70				75					80
Ser	Cys	Ser	Leu	Pro	Cys	Val	Lys	Lys	His	Lys	Ala	Glu	Leu	Thr	Cys
				85					90					95	
Asn	Gly	Val	Arg	Asp	Lys	Thr	Ala	Tyr	Ile	Ser	Ile	Gln	Gln	Phe	Thr
			100				105					110			
Glu	Met	Asn	Leu	Leu	Ser	Asp	Tyr	Arg	Phe	Leu	Glu	Asp	Val	Ala	Arg
			115				120					125			
Thr	Ala	Asp	His	Ile	Ser	Arg	Asp	Ala	Phe	Leu	Lys	Arg	Pro	Ile	Ser
			130				135					140			
Asn	Lys	Tyr	Met	Tyr	Phe	Met	Lys	Asn	Arg	Ala	Arg	Arg	Gln	Gly	Ile
			145				150				155				160
Asn	Leu	Lys	Leu	Leu	Pro	Asn	Gly	Phe	Thr	Lys	Arg	Lys	Glu	Asn	Ser
				165					170					175	
Thr	Phe	Phe	Asp	Lys	Lys	Lys	Gln	Gln	Phe	Cys	Trp	His	Val	Lys	Leu
			180					185					190		
Gln	Phe	Pro	Gln	Ser	Gln	Ala	Ser	Thr	Xaa	Lys	Lys	Arg	Val	Pro	Asp
			195				200					205			
Asp	Lys	Thr	Ile	Asn	Glu	Ile	Leu	Lys	Pro	Tyr	Ile	Asp	Pro	Glu	Lys
			210				215					220			
Ser	Asp	Pro	Val	Ile	Arg	Gln	Arg	Leu	Lys	Ala	Tyr	Ile	Arg	Ser	Gln
					230					235					240
Thr	Gly	Val	Gln	Ile	Leu	Met	Lys	Ile	Glu	Tyr	Met	Gln	Gln	Asn	Leu
				245					250					255	
Val	Arg	Tyr	Tyr	Glu	Leu	Asp	Pro	Tyr	Lys	Ser	Leu	Leu	Asp	Asn	Leu
				260				265					270		
Arg	Asn	Lys	Val	Ile	Ile	Glu	Tyr	Pro	Thr	Leu	His	Val	Val	Leu	Lys
				275			280					285			
Gly	Ser	Asn	Asn	Asp	Met	Lys	Val	Leu	His	Gln	Val	Lys	Ser	Glu	Ser
			290				295				300				
Thr	Lys	Asn	Val	Gly	Asn	Glu	Asn								
			305			310		312							

<210> 3684

<211> 479

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(472)

<223> Xaa = any amino acid or nothing

<400> 3684

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Ser Leu Gln Glu Asn Val Gln Glu Lys Arg Val Arg Val Cys Pro Gly
 1          5          10          15
Leu Gly Gly Leu Leu Pro Asn Gly Thr Pro Ser Ile Thr Ala Ala Ala
      20          25          30
Ala Pro Gln Val Leu Trp Arg His Val Gln Pro Gly Cys Ser His His
      35          40          45
Leu His Ala Cys Val Ile Arg Ala Ala Cys Arg Ala Gly Glu Gly His
      50          55          60
Ala Asp Arg His Ala Gly Pro Pro Glu Thr Pro Val Thr Leu Pro Ser
      65          70          75          80
Ser Trp Pro Trp Ser Ser Pro Trp Glu Arg Gln Cys Pro Met His Leu
      85          90          95
Xaa Ala Pro Gly His Ala Phe Arg Pro Val Pro Thr Glu His Arg Arg
      100          105          110
Gly Trp Ala Ala Leu Gly His His Arg Ala Ala Ala Gly Pro Leu Arg
      115          120          125
Glu Pro Ala Ser Gly Ser Gln Pro Ala Pro Ala Ser Cys Xaa Pro Glu
      130          135          140
Cys His His Gly Cys Pro Glu Gln Thr Arg Gln Cys Gln Asp Leu Leu
      145          150          155          160
Arg Glu Ala Val Val Ala Pro Glu Gln Arg Gly Xaa Pro Cys Ala His
      165          170          175
Leu Gln Thr Xaa Ala Thr Ala Thr Thr Leu Cys Pro Gln Val Pro Ala
      180          185          190
Gly Arg Val Trp Gln Pro Gly His Ser Cys His Leu Leu Pro His Arg
      195          200          205
His Asp Gly Ser His Xaa His His Cys Ala Ala His Arg Arg Pro Val
      210          215          220
Thr Arg Arg Gln Ala Ala His Gly Val Pro Leu Pro Asp Ala Cys Tyr
      225          230          235          240
Ser Pro His His Thr Leu Pro Ala Ala Pro Pro Pro Ala Thr Arg Pro
      245          250          255
Ala Gly His Thr Ala Thr His Pro Glu Xaa Gly Gly Asp Leu Thr Pro
      260          265          270
Val Pro Asp Gly Pro His Asp Cys Pro Arg Asp Val Gln Gly Ile Pro
      275          280          285
Gly Ala Gly Gly Gly Ser Gln Leu Ala Pro Cys Cys Pro Pro Phe Pro
      290          295          300
Ala Ala Pro Val Ser Val Gln Gly Thr Gln Gly Leu Gly Pro Lys Asn
      305          310          315          320
Val Leu His Xaa Gln Trp Glu Gly Ile Arg Trp Gln Lys Glu Pro Glu
      325          330          335
Pro Gly Pro Pro Pro Glu Val Glu Leu Lys Arg Gly Ala Lys Cys Arg
      340          345          350
Ile Gly Asp His Gly Leu Gly Ala Val Leu Gly Gln Gly Glu Tyr Ala
      355          360          365
Ser Xaa Ser Pro Ser Ile Pro Trp Xaa Ala Ser Ser Ser Ala Cys Pro
      370          375          380
Pro Leu His Pro Thr Pro Thr Val Tyr Thr Gln Ser Pro Ala Ala Ala
      385          390          395          400
Pro Gly Trp Thr Arg Pro Pro Ser Pro Pro Pro Gly Leu Tyr Pro

```

```

      405      410      415
Gly Pro Pro Ala Ser His Ala Pro Gly Val Arg Gly Gly Ile Ser His
      420      425      430
Gln Leu Tyr Ser Leu Pro Xaa Leu Cys Arg Glu Cys Cys Ser Cys Pro
      435      440      445
Pro Pro Pro Pro Ala His Gly Gly Arg Cys Pro Ser Leu Leu Pro Pro
      450      455      460
Glu Ala Leu Ala Lys Leu Leu Leu
465      470      472

```

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<210> 3685
<211> 114
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(112)
<223> Xaa = any amino acid or nothing

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```

<400> 3685
Ala Trp Val Leu Gln Cys Lys Ile Asn Thr Glu Leu Gln Thr Glu Val
 1      5      10      15
Val Met Leu Lys Ser Met Val Leu Trp Leu Gly Glu Gln Val Gln Ser
      20      25      30
Leu Gln Leu Gln Gln Gln Leu His Cys His Phe Asn His Thr His Ile
      35      40      45
Cys Val Thr Asn Leu Glu Tyr Asn Lys Glu Tyr Pro Trp Asp Leu Val
 50      55      60
Lys Ala His Leu Gln Gly Ala Ser Thr Ser Asn Ile Thr Phe Asp Ile
 65      70      75      80
Gly Glu Leu Gln Lys Lys Ile Leu Asp Leu Asn Lys Gln Thr Gln Glu
      85      90      95
Phe Gln Pro Ser Leu Xaa Ala Trp Thr Glu Phe Gln Gln Gly Leu Glu
      100      105      110      112

```

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<210> 3686
<211> 248
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(247)
<223> Xaa = any amino acid or nothing

```

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<400> 3686
Val Ser Asp Val Val Lys Asn Gln Leu Val Glu Val Gln Cys Arg Gln
 1      5      10      15
Asp Gly Cys Asp Ala Val Glu Asn Val His Gln Met Phe Met Phe Asn
      20      25      30
Trp Phe Thr Asp Cys Leu Trp Thr Leu Phe Leu Ser Asn Tyr Gln Pro
      35      40      45
Ser Val Glu Ser Ser Ser Pro Gly Gly Ser Ala Thr Ser Asp Asp His
 50      55      60
Glu Phe Asp Pro Ser Ala Asp Met Leu Val His Asp Phe Asp Asp Glu
 65      70      75      80
Arg Thr Leu Glu Glu Glu Glu Met Met Glu Gly Glu Thr Asn Phe Ser

```

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<210> 3687
<211> 395
<212> PRT
<213> Homo sapiens
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5448

260	265	270
Asp Pro Ser Asn Arg Ser Phe Phe Ser Glu Ile Ile Ser Ser Val Ser		
275	280	285
Asp Val Lys Phe Ser His Ser Asp Arg Tyr Met Leu Thr Arg Asp Tyr		
290	295	300
Leu Thr Val Lys Val Trp Asp Leu Asn Met Glu Ala Arg Pro Ile Glu		
305	310	315
Thr Tyr Gln Val His Asp Tyr Leu Arg Ser Lys Leu Cys Ser Leu Tyr		
325	330	335
Glu Asn Asp Cys Ile Phe Asp Lys Phe Glu Cys Ala Trp Asn Gly Ser		
340	345	350
Asp Arg Ile Ile Met Thr Gly Ala Tyr Asn Asn Phe Phe Arg Met Phe		
355	360	365
Asp Arg Asn Thr Lys Arg Asp Val Thr Leu Glu Ala Ser Arg Gly Ser		
370	375	380
Ser Lys Pro Arg Ala Val Leu		
385	390	391

<210> 3688
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 3688

Lys Lys Val Pro Gly Arg Leu Ser Glu Met Ser Phe Ser Leu Asn Phe		
1	5	10
Thr Leu Pro Ala Asn Thr Thr Ser Ser Pro Val Thr Asp Cys Gly Pro		
20	25	30
Ser Leu Gly Leu Ala Ala Gly Ile Pro Leu Leu Val Ala Thr Ala Leu		
35	40	45
Leu Val Ala Leu Leu Phe Thr Leu Ile His Arg Arg Arg Ser Ser Ile		
50	55	60
Glu Ala Met Glu Glu Ser Asp Arg Pro Cys Glu Ile Ser Glu Ile Asp		
65	70	75
Asp Asn Pro Lys Ile Ser Glu Asn Pro Arg Arg Ser Pro Thr His Glu		
85	90	95
Lys Asn Thr Met Gly Ala Gln Glu Ala His Ile Tyr Val Lys Thr Val		
100	105	110
Ala Gly Ser Glu Glu Pro Val His Asp Arg Tyr Arg Pro Thr Ile Glu		
115	120	125
Met Glu Arg Arg Arg		
130	133	

<210> 3689
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 3689

Gly Arg Val Leu Val His Cys Ala Met Gly Val Ser Arg Ser Ala Thr		
1	5	10
Leu Val Leu Ala Phe Leu Met Ile Tyr Glu Asn Met Thr Leu Val Glu		
20	25	30
Ala Ile Pro Asp Gly Ala Gly Pro Gln Ile Ser Ala Leu Thr Gln		
35	40	45
Ala Phe Val Arg Gln Leu Gln Val Leu Asp Asn Arg Leu Gly Arg Glu		
50	55	60
		64

<210> 3690
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 3690
 Met Gly Ala His Leu Val Arg Arg Tyr Leu Gly Asp Ala Ser Val Glu
 1 5 10 15
 Pro Asp Pro Leu Gln Met Pro Thr Phe Pro Pro Asp Tyr Gly Phe
 20 25 30 31

<210> 3691
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 3691
 Met Gly Ala His Leu Val Arg Arg Tyr Leu Gly Asp Ala Ser Val Glu
 1 5 10 15
 Pro Asp Pro Leu Gln Met Pro Thr Phe Pro Pro Asp Tyr Gly Phe
 20 25 30 31

<210> 3692
 <211> 943
 <212> PRT
 <213> Homo sapiens

<400> 3692
 Pro Leu Val Arg Arg Leu Leu Arg Gln Thr Leu Arg Arg Val Gly Gly
 1 5 10 15
 Ala Arg Ala Val Arg Glu Ala Val Met Arg Ala Val Leu Thr Trp Arg
 20 25 30
 Asp Lys Ala Glu His Cys Ile Asn Asp Ile Ala Phe Lys Pro Asp Gly
 35 40 45
 Thr Gln Leu Ile Leu Ala Ala Gly Ser Arg Leu Leu Val Tyr Asp Thr
 50 55 60
 Ser Asp Gly Thr Leu Leu Gln Pro Leu Lys Gly His Lys Asp Thr Val
 65 70 75 80
 Tyr Cys Val Ala Tyr Ala Lys Asp Gly Lys Arg Phe Ala Ser Gly Ser
 85 90 95
 Ala Asp Lys Ser Val Ile Ile Trp Thr Ser Lys Leu Glu Gly Ile Leu
 100 105 110
 Lys Tyr Thr His Asn Asp Ala Ile Gln Cys Val Ser Tyr Asn Pro Ile
 115 120 125
 Thr His Gln Leu Ala Ser Cys Ser Ser Ser Asp Phe Gly Leu Trp Ser
 130 135 140
 Pro Glu Gln Lys Ser Val Ser Lys His Lys Ser Ser Ser Lys Ile Ile
 145 150 155 160
 Cys Cys Ser Trp Thr Asn Asp Gly Gln Tyr Leu Ala Leu Gly Met Phe
 165 170 175
 Asn Gly Ile Ile Ser Ile Arg Asn Lys Asn Gly Glu Glu Lys Val Lys
 180 185 190
 Ile Glu Arg Pro Gly Gly Ser Leu Ser Pro Ile Trp Ser Ile Cys Trp

195	200	205
Asn Pro Ser Ser Arg Trp Glu Ser Phe Trp Met Asn Arg Glu Asn Glu		
210	215	220
Asp Ala Glu Asp Val Ile Val Asn Arg Tyr Ile Gln Glu Ile Pro Ser		
225	230	235
Thr Leu Lys Ser Ala Val Tyr Ser Ser Gln Gly Ser Glu Ala Glu Glu		240
	245	250
Glu Glu Pro Glu Glu Glu Asp Asp Ser Pro Arg Asp Asp Asn Leu Glu		255
	260	265
Glu Arg Asn Asp Ile Leu Ala Val Ala Asp Trp Gly Gln Lys Val Ser		270
	275	280
Phe Tyr Gln Leu Ser Gly Lys Gln Ile Gly Lys Asp Arg Ala Leu Asn		285
	290	295
Phe Asp Pro Cys Cys Ile Ser Tyr Phe Thr Lys Gly Glu Tyr Ile Leu		300
305	310	315
Leu Gly Gly Ser Asp Lys Gln Val Ser Leu Phe Thr Lys Asp Gly Val		320
	325	330
Arg Leu Gly Thr Val Gly Glu Gln Asn Ser Trp Val Trp Thr Gly Gln		335
	340	345
Ala Lys Pro Asp Ser Asn Tyr Val Val Gly Gly Cys Gln Asp Gly Thr		350
	355	360
Ile Ser Phe Tyr Gln Leu Ile Phe Ser Thr Val His Gly Leu Tyr Lys		365
	370	375
Asp Arg Tyr Ala Tyr Arg Asp Ser Met Thr Asp Val Ile Val Gln His		380
385	390	395
Leu Ile Thr Glu Gln Lys Val Arg Ile Lys Cys Lys Glu Leu Val Lys		400
	405	410
Lys Ile Ala Ile Tyr Arg Asn Arg Leu Ala Ile Gln Leu Pro Glu Lys		415
	420	425
Ile Leu Ile Tyr Glu Leu Tyr Ser Glu Asp Leu Ser Asp Met His Tyr		430
	435	440
Arg Val Lys Glu Lys Ile Ile Lys Lys Phe Glu Cys Asn Leu Leu Val		445
	450	455
Val Cys Ala Asn His Ile Ile Leu Cys Gln Glu Lys Arg Leu Gln Cys		460
465	470	475
Leu Ser Phe Ser Gly Val Lys Glu Arg Glu Trp Gln Met Glu Ser Leu		480
	485	490
Ile Arg Tyr Ile Lys Val Ile Gly Gly Pro Pro Gly Arg Glu Gly Leu		495
	500	505
Leu Val Gly Leu Lys Asn Gly Gln Ile Leu Lys Ile Phe Val Asp Asn		510
	515	520
Leu Phe Ala Ile Val Leu Leu Lys Gln Ala Thr Ala Val Arg Cys Leu		525
	530	535
Asp Met Ser Ala Ser Arg Lys Lys Leu Ala Val Val Asp Glu Asn Asp		540
545	550	555
Thr Cys Leu Val Tyr Asp Ile Asp Thr Lys Glu Leu Leu Phe Gln Glu		560
	565	570
Pro Asn Ala Asn Ser Val Ala Trp Asn Thr Gln Cys Glu Asp Met Leu		575
	580	585
Cys Phe Ser Gly Gly Gly Tyr Leu Asn Ile Lys Ala Ser Thr Phe Pro		590
	595	600
Val His Arg Gln Lys Leu Gln Gly Phe Val Val Gly Tyr Asn Gly Ser		605
	610	615
Lys Ile Phe Cys Leu His Val Phe Ser Ile Ser Ala Val Glu Val Pro		620
625	630	635
Gln Ser Ala Pro Met Tyr Gln Tyr Leu Asp Arg Lys Leu Phe Lys Glu		640
	645	650
Ala Tyr Gln Ile Ala Cys Leu Gly Val Thr Asp Thr Asp Trp Arg Glu		655
	660	665
Leu Ala Met Glu Ala Leu Glu Gly Leu Asp Phe Glu Thr Ala Lys Lys		670
	675	680
Glu Arg Lys Lys Arg Gly Glu Thr Asn Asn Asp Leu Phe Leu Ala Asp		685
	690	695
Val Phe Ser Tyr Gln Gly Lys Phe His Glu Ala Ala Lys Leu Tyr Lys		700

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705              710              715              720
Arg Ser Gly His Glu Asn Leu Ala Leu Glu Met Tyr Thr Asp Leu Cys
              725              730              735
Met Phe Glu Tyr Ala Lys Asp Phe Leu Gly Ser Gly Asp Pro Lys Glu
              740              745              750
Thr Lys Met Leu Ile Thr Lys Gln Ala Asp Trp Ala Arg Asn Ile Lys
              755              760              765
Glu Pro Lys Ala Ala Val Glu Met Tyr Ile Ser Ala Gly Glu His Val
              770              775              780
Lys Ala Ile Glu Ile Cys Gly Asp His Gly Trp Val Asp Met Leu Ile
785              790              795              800
Asp Ile Ala Arg Lys Leu Asp Lys Ala Glu Arg Glu Pro Leu Leu Leu
              805              810              815
Cys Ala Thr Tyr Leu Lys Lys Leu Asp Ser Pro Gly Tyr Ala Ala Glu
              820              825              830
Thr Tyr Leu Lys Met Gly Asp Leu Lys Ser Leu Val Gln Leu His Val
              835              840              845
Glu Thr Gln Arg Trp Asp Glu Ala Phe Ala Leu Gly Glu Lys His Pro
              850              855              860
Glu Phe Lys Asp Asp Ile Tyr Met Pro Tyr Ala Gln Trp Leu Ala Glu
865              870              875              880
Asn Asp Arg Phe Glu Glu Ala Gln Lys Ala Phe His Lys Ala Gly Arg
              885              890              895
Gln Arg Glu Ala Val Gln Val Leu Glu Gln Leu Thr Asn Asn Ala Val
              900              905              910
Ala Glu Ser Arg Phe Asn Asp Ala Ala Tyr Tyr Tyr Trp Met Leu Ser
              915              920              925
Met Gln Cys Leu Asp Ile Ala Gln Asp Pro Ala Gln Lys Asp
              930              935              940              942

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<210> 3693

<211> 366

<212> PRT

<213> Homo sapiens

<400> 3693

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Ser Ser Phe Pro Thr Cys Met Arg Thr Val Phe His Ser Asn Thr Ser
  1              5              10              15
Val Ser Ser Leu Leu His Arg Pro Gly His Val Thr Pro Gln Leu Thr
              20              25              30
Ile His Gly Gly Trp Arg His His Arg Asp His Thr Ala Ile Asp Glu
              35              40              45
Trp Asp Phe Asn Pro Ser Lys Phe Leu Ile Tyr Thr Cys Leu Leu Leu
              50              55              60
Phe Ser Val Leu Leu Pro Leu Arg Leu Asp Gly Ile Ile Gln Trp Ser
65              70              75              80
Tyr Trp Ala Val Phe Ala Pro Ile Trp Leu Trp Lys Leu Leu Val Val
              85              90              95
Ala Gly Ala Ser Val Gly Ala Gly Val Trp Ala Arg Asn Pro Arg Tyr
              100              105              110
Arg Thr Glu Gly Glu Ala Cys Val Glu Phe Lys Ala Met Leu Ile Ala
              115              120              125
Val Gly Ile His Leu Leu Leu Leu Met Phe Glu Val Leu Val Cys Asp
              130              135              140
Arg Val Glu Arg Gly Thr His Phe Trp Leu Leu Val Phe Met Pro Leu
145              150              155              160
Phe Phe Val Ser Pro Val Ser Val Ala Ala Cys Val Trp Gly Phe Arg
              165              170              175
His Asp Arg Ser Leu Glu Leu Glu Ile Leu Cys Ser Val Asn Ile Leu
              180              185              190
Gln Phe Ile Phe Ile Ala Leu Lys Leu Asp Arg Ile Ile His Trp Pro

```

195	200	205
Trp Leu Val Val Phe Val	Pro Leu Trp Ile Leu Met	Ser Phe Leu Cys
210	215	220
Leu Val Val Leu Tyr Tyr	Ile Val Trp Ser Leu Leu Phe	Leu Arg Ser
225	230	235
Leu Asp Val Val Ala Glu Gln Arg Arg	Thr His Val Thr Met Ala Ile	240
245	250	255
Ser Trp Ile Thr Ile Val Val	Pro Leu Leu Thr Phe Glu Val	Leu Leu
260	265	270
Val His Arg Leu Asp Gly His	Asn Thr Phe Ser Tyr Val	Ser Ile Phe
275	280	285
Val Pro Leu Trp Leu Ser Leu Leu Thr	Leu Met Ala Thr Thr Phe Arg	
290	295	300
Arg Lys Gly Gly Asn His Trp Trp	Phe Ala Ile Arg Arg Asp Phe Cys	
305	310	315
Gln Asp Gln Leu Pro Gln Pro Thr Gly Lys	Pro Pro Pro Pro Pro Leu	
325	330	335
Thr Asp His His Gly Glu Lys Ala Leu	Pro Leu Gln Asn Lys Asp Arg	
340	345	350
Gly Ser Trp Pro Ala Ser Arg Gly Ser	Pro Arg Leu Leu	
355	360	365

<210> 3694

<211> 93

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(93)

<223> Xaa = any amino acid or nothing

<400> 3694

Pro Arg Ser Leu Ile Asp Tyr Lys Ser Tyr Met Asp Thr Lys Leu Leu	
1 5 10 15	
Val Ala Arg Phe Leu Glu Gln Ser Ser Cys Thr Met Thr Pro Asp Ile	
20 25 30	
His Glu Leu Val Glu Asn Ile Lys Ser Val Leu Lys Ser Asp Glu Glu	
35 40 45	
His Met Glu Glu Ala Ile Thr Ser Ala Ser Phe Leu Glu Gln Ile Met	
50 55 60	
Ala His Ser Xaa Gln His Ile Arg Ala His Lys Leu Pro Xaa Glu Thr	
65 70 75 80	
Ala Gly Leu Xaa Thr Ser Glu Leu Arg Xaa Leu Thr Pro	
85 90 93	

<210> 3695

<211> 93

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(93)

<223> Xaa = any amino acid or nothing

<400> 3695

Pro Arg Ser Leu Ile Asp Tyr Lys Ser Tyr Met Asp Thr Lys Leu Leu	
1 5 10 15	
Val Ala Arg Phe Leu Glu Gln Ser Ser Cys Thr Met Thr Pro Asp Ile	

```

      20      25      30
His Glu Leu Val Glu Asn Ile Lys Ser Val Leu Lys Ser Asp Glu Glu
      35      40      45
His Met Glu Glu Ala Ile Thr Ser Ala Ser Phe Leu Glu Gln Ile Met
      50      55      60
Ala His Ser Xaa Gln His Ile Arg Ala His Lys Leu Pro Xaa Glu Thr
      65      70      75      80
Ala Gly Leu Xaa Thr Ser Glu Leu Arg Xaa Leu Thr Pro
      85      90      93

```

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<210> 3696
<211> 93
<212> PRT
<213> Homo sapiens

```

```

      <400> 3696
Leu Ser Ala Ala Leu Trp Glu Glu Pro Ile Leu Ser Leu Trp Ser Glu
  1      5      10      15
Thr Lys Glu Leu Thr Asn Arg Gly Lys Met Asn Tyr Pro Gln Ile Gly
      20      25      30
Pro His Arg Pro His Val Lys Gly Leu Arg Val Arg Pro Gly Pro Gly
      35      40      45
Thr Leu Ser Asn Ala Pro Lys Ser Leu Cys Pro Gly Met Ser Asn Ser
      50      55      60
Asp Arg Gly Ile His Gly Gly Glu Gly Gln Gly Pro Gly Lys Arg Ala
      65      70      75      80
Gly His Leu Gly Arg Gly Gly Gly Met Ser Phe Leu
      85      90      92

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<210> 3697
<211> 118
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(118)
<223> Xaa = any amino acid or nothing

```

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      <400> 3697
Val Trp Leu Xaa Thr Leu Ser Xaa His Thr Cys Ala Leu Met Thr Val
  1      5      10      15
Cys Arg Ser Cys Leu Val Lys Tyr Leu Glu Glu Asn Asn Thr Cys Pro
      20      25      30
Thr Cys Arg Ile Val Ile His Gln Ser His Pro Leu Gln Tyr Ile Gly
      35      40      45
His Asp Arg Thr Met Gln Asp Ile Val Tyr Lys Leu Val Pro Gly Leu
      50      55      60
Gln Glu Ala Glu Met Arg Lys Gln Arg Glu Phe Tyr His Lys Leu Gly
      65      70      75      80
Met Glu Val Pro Gly Asp Ile Lys Gly Glu Thr Cys Ser Ala Lys Gln
      85      90      95
His Leu Asp Ser His Arg Asn Gly Glu Thr Lys Ala Asp Asp Ser Ser
      100      105      110
Asn Lys Glu Ala Ala Glu
      115      118

```

<210> 3698
 <211> 190
 <212> PRT
 <213> Homo sapiens

 <221> misc_feature
 <222> (1)...(190)
 <223> Xaa = any amino acid or nothing

<400> 3698
 Lys Gln Cys Gly Ile Pro His Glu Val Val Arg Asp Glu Asn Ser Ser
 1 5 10 15
 Val Tyr Ala Glu Val Ser Arg Leu Leu Leu Ala Thr Gly His Trp Lys
 20 25 30
 Arg Leu Arg Arg Asp Asn Pro Arg Phe Asn Leu Met Leu Gly Glu Arg
 35 40 45
 Asn Arg Leu Pro Phe Gly Arg Leu Gly His Glu Pro Gly Leu Val Gln
 50 55 60
 Leu Val Asn Tyr Tyr Arg Gly Ala Asp Lys Leu Cys Arg Lys Ala Ser
 65 70 75 80
 Leu Val Lys Leu Ile Lys Thr Ser Pro Glu Leu Ala Glu Ser Cys Thr
 85 90 95
 Trp Phe Pro Glu Ser Tyr Val Ile Tyr Pro Thr Asn Leu Lys Thr Pro
 100 105 110
 Val Ala Pro Ala Gln Asn Gly Ile Gln Pro Pro Ile Ser Asn Ser Arg
 115 120 125
 Thr Asp Glu Arg Glu Phe Phe Leu Ala Ser Tyr Asn Arg Lys Lys Glu
 130 135 140
 Asp Gly Glu Gly Asn Val Trp Ile Ala Lys Ser Ser Ala Gly Ala Lys
 145 150 155 160
 Val Trp Val Gln Trp Xaa Met Thr Asp Leu Glu Glu Glu Ile Asp Ile
 165 170 175
 Pro Ser Pro Val Gly Leu Gly Leu Glu Ser Glu Trp Pro Leu
 180 185 190

<210> 3699
 <211> 141
 <212> PRT
 <213> Homo sapiens

 <221> misc_feature
 <222> (1)...(141)
 <223> Xaa = any amino acid or nothing

<400> 3699
 Leu His Cys Lys Met Gly Ala Leu Glu Thr Gln Thr His Pro Cys Ser
 1 5 10 15
 Gln Asn Met Leu Arg Ser Leu Gln Lys Cys Cys Cys Lys Val Glu Glu
 20 25 30
 His His Leu Gln Pro Val Gln Val Leu Gln Thr Leu Leu His Ser Ala
 35 40 45
 Thr Ala Gly Thr Gly Cys Arg Arg Pro Ala Arg Pro Pro Pro Ala Pro
 50 55 60
 Pro Thr Pro Thr Pro Trp Arg Ser Arg Gln Ser Gly Lys Gln Ser Glu
 65 70 75 80
 Arg Ala Ser Xaa Leu Lys Gly Arg Gly Arg Tyr Gly Leu Gly Ala Leu
 85 90 95
 Gly Gly Arg Gly Gly Arg Ala Leu Gly Gly Ser Arg Trp Pro Pro Pro
 100 105 110
 Leu Pro Gly Glu Thr Leu Phe Ser Gly Cys Lys His Arg Arg Arg Arg

	115		120		125
Arg	Gly Ser Asp Ala Ala	Pro Gly Glu Glu Ala	Gly Thr		
130		135		140 141	

<210> 3700
 <211> 428
 <212> PRT
 <213> Homo sapiens

<400> 3700

Gly	Tyr	Gln	Ile	Gly	Met	Ala	Leu	Ala	Ser	Gly	Pro	Ala	Arg	Arg	Ala
1				5					10					15	
Leu	Ala	Gly	Ser	Gly	Gln	Leu	Gly	Leu	Gly	Gly	Phe	Gly	Ala	Pro	Arg
		20					25						30		
Arg	Gly	Ala	Tyr	Glu	Trp	Gly	Val	Arg	Ser	Thr	Arg	Lys	Ser	Glu	Pro
	35					40						45			
Pro	Pro	Leu	Asp	Arg	Val	Tyr	Glu	Ile	Pro	Gly	Leu	Glu	Pro	Ile	Thr
	50					55					60				
Phe	Ala	Gly	Lys	Met	His	Phe	Val	Pro	Trp	Leu	Ala	Arg	Pro	Ile	Phe
65					70					75				80	
Pro	Pro	Trp	Asp	Arg	Gly	Tyr	Lys	Asp	Pro	Arg	Phe	Tyr	Arg	Ser	Pro
			85					90						95	
Pro	Leu	His	Glu	His	Pro	Leu	Tyr	Lys	Asp	Gln	Ala	Cys	Tyr	Ile	Phe
		100						105					110		
His	His	Arg	Cys	Arg	Leu	Leu	Glu	Gly	Val	Lys	Gln	Ala	Leu	Trp	Leu
	115					120					125				
Thr	Lys	Thr	Lys	Leu	Ile	Glu	Gly	Leu	Pro	Glu	Lys	Val	Leu	Ser	Leu
	130					135					140				
Val	Asp	Asp	Pro	Arg	Asn	His	Ile	Glu	Asn	Gln	Asp	Glu	Cys	Val	Leu
145					150					155				160	
Asn	Val	Ile	Ser	His	Ala	Arg	Leu	Trp	Gln	Thr	Thr	Glu	Glu	Ile	Pro
			165					170						175	
Lys	Arg	Glu	Thr	Tyr	Cys	Pro	Val	Ile	Val	Asp	Asn	Leu	Ile	Gln	Leu
	180						185					190			
Cys	Lys	Ser	Gln	Ile	Leu	Lys	His	Pro	Ser	Leu	Ala	Arg	Arg	Ile	Cys
	195					200					205				
Val	Gln	Asn	Ser	Thr	Phe	Ser	Ala	Thr	Trp	Asn	Arg	Glu	Ser	Leu	Leu
	210					215					220				
Leu	Gln	Val	Arg	Gly	Ser	Gly	Gly	Ala	Arg	Leu	Ser	Thr	Lys	Asp	Pro
225				230				235						240	
Leu	Pro	Thr	Ile	Ala	Ser	Arg	Glu	Glu	Ile	Glu	Ala	Thr	Lys	Asn	His
			245					250						255	
Val	Leu	Glu	Thr	Phe	Tyr	Pro	Ile	Ser	Pro	Ile	Ile	Asp	Leu	His	Glu
	260							265					270		
Cys	Asn	Ile	Tyr	Asp	Val	Lys	Asn	Asp	Thr	Gly	Phe	Gln	Glu	Gly	Tyr
	275					280						285			
Pro	Tyr	Pro	Tyr	Pro	His	Thr	Leu	Tyr	Leu	Leu	Asp	Lys	Ala	Asn	Leu
	290					295					300				
Arg	Pro	His	Arg	Leu	Gln	Pro	Asp	Gln	Leu	Arg	Ala	Lys	Met	Ile	Leu
305					310					315				320	
Phe	Ala	Phe	Gly	Ser	Ala	Leu	Ala	Gln	Ala	Arg	Leu	Leu	Tyr	Gly	Asn
			325					330						335	
Asp	Ala	Lys	Val	Leu	Glu	Gln	Pro	Val	Val	Val	Gln	Ser	Val	Gly	Thr
		340						345					350		
Asp	Gly	Arg	Val	Phe	His	Phe	Leu	Val	Phe	Gln	Leu	Asn	Thr	Thr	Asp
	355						360					365			
Leu	Asp	Ser	Asn	Glu	Gly	Val	Lys	Asn	Leu	Ala	Trp	Val	Asp	Ser	Asp
	370					375					380				
Gln	Leu	Leu	Tyr	Gln	His	Phe	Trp	Cys	Leu	Pro	Val	Ile	Lys	Lys	Arg
385					390					395					400
Val	Val	Val	Glu	Pro	Val	Gly	Pro	Val	Gly	Phe	Lys	Pro	Glu	Thr	Phe

405
 Arg Lys Phe Leu Ala Leu Tyr Leu His Gly Ala Ala
 420 425 428

<210> 3701
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 3701
 Trp Thr Leu Cys Gly Pro Glu Ala Gly Met Val Gly Tyr Asp Pro Lys
 1 5 10 15
 Pro Asp Gly Arg Asn Asn Thr Lys Phe Gln Val Ala Val Ala Gly Ser
 20 25 30
 Val Ser Gly Leu Val Thr Arg Ala Leu Ile Ser Pro Phe Asp Val Ile
 35 40 45
 Lys Ile Arg Phe Gln Leu Gln His Glu Arg Leu Ser Arg Ser Asp Pro
 50 55 60
 Ser Ala Lys Tyr His Gly Ile Leu Gln Ala Ser Arg Gln Ile Leu Gln
 65 70 75 80
 Glu Glu Gly Pro Thr Ala Phe Trp Lys Gly His Val Pro Ala Gln Ile
 85 90 95
 Leu Ser Ile Gly Tyr Gly Ala Val Gln Phe Leu Ser Phe Glu Met Leu
 100 105 110
 Thr Glu Leu Val His Arg Gly Ser Val Tyr Asp Ala Arg Glu
 115 120 125 126

<210> 3702
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 3702
 Gly Phe Trp Glu Lys Thr Asn Gln Ser Ser His Ser Met Asp Pro Leu
 1 5 10 15
 Gly Ala Pro Ser Gln Phe Val Asp Val Asp Thr Leu Pro Ser Trp Gly
 20 25 30
 Asp Ser Cys Gln Asp Glu Leu Asn Ser Ser Asp Thr Thr Ala Glu Ile
 35 40 45
 Phe Gln Glu Asp Thr Val Arg Ser Pro Phe Leu Tyr Asn Lys Asp Val
 50 55 60
 Asn Gly Lys Val Val Leu Trp Lys Gly Asp Val Ala Leu Leu Asn Cys
 65 70 75 80
 Thr Ala Ile Val Asn Thr Ser Asn Glu Ser Leu Thr Asp Lys Asn Pro
 85 90 95
 Val Ser Glu Ser Ile Phe Met Leu Ala Gly Pro Asp Leu Lys Glu Asp
 100 105 110
 Leu Gln Lys Leu Lys Gly Cys Arg Thr Gly Glu Ala Gln Leu Thr Lys
 115 120 125
 Gly Phe Asn Leu Ala Ala Arg Phe Ile Ile His Thr Val Gly Pro Lys
 130 135 140
 Tyr Lys Ser Arg Tyr Arg Thr Ala Ala Glu Ser Ser Leu Tyr Ser Cys
 145 150 155 160
 Tyr Arg Asn Val Leu Gln Leu Ala Lys Glu Gln Ser Met Ser Ser Val
 165 170 175
 Gly Phe Cys Val Ile Asn Ser Ala Lys Arg Gly Tyr Pro Leu Lys Asp
 180 185 190
 Ala Thr His Ile Ala Leu Arg Thr Val Arg Arg Phe Leu Glu Ile His

195 200 205
 Gly Glu Thr Ile Glu Lys Val Val
 210 215 216

<210> 3703
 <211> 376
 <212> PRT
 <213> Homo sapiens

<400> 3703
 Ser Leu Gly Pro Ser Pro Lys Ser Ala Thr Ile Pro Cys Cys Gly Asp
 1 5 10 15
 Thr Met Ala Pro Glu Glu Asp Ala Gly Gly Glu Ala Leu Gly Gly Ser
 20 25 30
 Phe Trp Glu Ala Gly Asn Tyr Arg Arg Thr Val Gln Arg Val Glu Asp
 35 40 45
 Gly His Arg Leu Cys Gly Asp Leu Val Ser Cys Phe Gln Glu Arg Ala
 50 55 60
 Arg Ile Glu Lys Ala Tyr Ala Gln Gln Leu Ala Asp Trp Ala Arg Lys
 65 70 75 80
 Trp Arg Gly Thr Val Glu Lys Gly Pro Gln Tyr Gly Thr Leu Glu Lys
 85 90 95
 Ala Trp His Ala Phe Phe Thr Ala Ala Glu Arg Leu Ser Ala Leu His
 100 105 110
 Leu Glu Val Arg Glu Lys Leu Gln Gly Gln Asp Ser Glu Arg Val Arg
 115 120 125
 Ala Trp Gln Arg Gly Ala Phe His Arg Pro Val Leu Gly Gly Phe Arg
 130 135 140
 Glu Ser Arg Ala Ala Glu Asp Gly Phe Arg Lys Ala Gln Lys Pro Trp
 145 150 155 160
 Leu Lys Arg Leu Lys Glu Val Glu Ala Ser Lys Lys Ser Tyr His Ala
 165 170 175
 Ala Arg Lys Asp Glu Lys Thr Ala Gln Thr Arg Glu Ser His Ala Lys
 180 185 190
 Ala Asp Ser Ala Val Ser Gln Glu Leu Arg Lys Leu Gln Glu Arg
 195 200 205
 Val Glu Arg Cys Ala Lys Glu Ala Glu Lys Thr Lys Ala Gln Tyr Glu
 210 215 220
 Gln Thr Leu Ala Glu Leu His Arg Tyr Thr Pro Arg Tyr Met Glu Asp
 225 230 235 240
 Met Glu Gln Ala Phe Glu Thr Cys Gln Ala Ala Glu Arg Gln Arg Leu
 245 250 255
 Leu Phe Phe Lys Asp Met Leu Leu Thr Leu His Gln His Leu Asp Leu
 260 265 270
 Ser Ser Ser Glu Lys Phe His Glu Leu His Arg Asp Leu His Gln Gly
 275 280 285
 Ile Glu Ala Ala Ser Asp Glu Glu Asp Leu Arg Trp Trp Arg Ser Thr
 290 295 300
 His Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp Ser
 305 310 315 320
 Leu Asp Thr Gln Arg Thr Ile Ser Arg Lys Glu Lys Gly Gly Arg Ser
 325 330 335
 Pro Asp Glu Val Thr Leu Thr Ser Ile Val Pro Thr Arg Asp Gly Thr
 340 345 350
 Ala Pro Pro Pro Gln Ser Pro Gly Ser Pro Gly Thr Gly Gln Asp Glu
 355 360 365
 Glu Trp Ser Asp Glu Glu Ser Pro
 370 375 376

<210> 3704
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 3704
 Ala Arg Gly Glu Asp Leu Ala Leu Ala Thr Gly Gly Gly Pro Asp Thr
 1 5 10 15
 Val Thr His Ser Asn Met Pro Cys Pro Asn Ser Leu Val Tyr Asp Cys
 20 25 30
 Trp Leu Asn Ile Lys Glu Cys Ser Val Gly Glu His Thr Phe Glu Asp
 35 40 45
 Leu Gly Leu Cys Pro Gly Arg Asn Gln Arg Glu Lys Lys Arg Ser Tyr
 50 55 60
 Lys Asp Phe Leu Arg Glu Glu Glu Lys Ile Ala Ala Gln Val Arg Asn
 65 70 75 80
 Ser Ser Lys Lys Lys Leu Lys Asp Ser Glu
 85 90

<210> 3705
 <211> 382
 <212> PRT
 <213> Homo sapiens

<400> 3705
 Leu Asn Trp Ala Asn Leu Val Ile Met Trp Pro Arg Glu Glu Glu Lys
 1 5 10 15
 Glu Lys Val Gln Asp Tyr Ser Leu Gly Gly Leu Ser Pro Asp Leu Arg
 20 25 30
 Ile Asp Val Ser Arg Lys Lys Lys Ile Leu Lys Ala Tyr Asp Glu Asp
 35 40 45
 Glu Asp Glu Asp Leu Tyr Pro Asp Ile His Pro Pro Pro Ser Leu Pro
 50 55 60
 Leu Pro Gly Gln Phe Thr Cys Pro Gln Cys Arg Lys Ser Phe Thr Arg
 65 70 75 80
 Arg Ser Phe Arg Pro Asn Leu Gln Leu Ala Asn Met Val Gln Ile Ile
 85 90 95
 Arg Gln Met Cys Pro Thr Pro Tyr Arg Gly Asn Arg Ser Asn Asp Gln
 100 105 110
 Gly Met Cys Phe Lys His Gln Glu Ala Leu Lys Leu Phe Cys Glu Val
 115 120 125
 Asp Lys Glu Ala Ile Cys Val Val Cys Arg Glu Ser Arg Ser His Lys
 130 135 140
 Gln His Ser Val Leu Pro Leu Glu Glu Val Val Gln Glu Tyr Lys Ala
 145 150 155 160
 Lys Leu Gln Gly His Val Glu Pro Leu Arg Lys His Leu Glu Ala Val
 165 170 175
 Gln Lys Met Lys Ala Lys Glu Glu Arg Arg Val Thr Glu Leu Lys Ser
 180 185 190
 Gln Met Lys Ser Glu Leu Ala Ala Val Ala Ser Glu Phe Gly Arg Leu
 195 200 205
 Thr Arg Phe Leu Ala Glu Glu Gln Ala Gly Leu Glu Arg Arg Leu Arg
 210 215 220
 Glu Met His Glu Ala Gln Leu Gly Arg Ala Gly Ala Ala Ala Ser Arg
 225 230 235 240
 Leu Ala Glu Gln Ala Ala Gln Leu Ser Arg Leu Leu Ala Glu Ala Gln
 245 250 255
 Glu Arg Ser Gln Gln Gly Gly Leu Arg Leu Leu Gln Asp Ile Lys Glu
 260 265 270
 Thr Phe Asn Arg Cys Glu Glu Val Gln Leu Gln Pro Pro Glu Val Trp

275	280	285
Ser Pro Asp Pro Cys Gln Pro His Ser His Asp Phe Leu Thr Asp Ala		
290	295	300
Ile Val Arg Lys Met Ser Arg Met Phe Cys Gln Ala Ala Arg Val Asp		
305	310	315
Leu Thr Leu Asp Pro Asp Thr Ala His Pro Ala Leu Met Leu Ser Pro		
	325	330
Asp Arg Arg Gly Val Arg Leu Ala Glu Arg Arg Gln Glu Val Ala Asp		
	340	345
His Pro Lys Arg Phe Ser Ala Asp Cys Cys Val Leu Gly Ala Gln Gly		
	355	360
Phe Arg Ser Gly Arg His Tyr Trp Glu Val Cys Met Gly Pro		
370	375	380
		382

<210> 3706

<211> 597

<212> PRT

<213> Homo sapiens

<400> 3706

Ser Arg Glu Arg Gln Thr Thr Trp Met Asp His Asn Phe Ala Pro Ala		
1	5	10
Pro Pro Glu Met Gln Ser His Gly Ala Pro Gly Pro Gly Thr Ser Phe		
	20	25
Ser His Ser His Val Leu Gly Arg Pro Ile Arg Pro Ser Arg Leu Pro		
	35	40
Gly Gly Gly Ser Pro Leu Thr Pro Val Leu Arg Lys Thr Ile His Leu		
	50	55
Asp Thr Phe Pro Gln Ser His Ile Pro Gln Thr Ser Ser Arg Leu Gly		
	65	70
Leu Gly Ala Arg Thr Arg Ser Val Pro Pro Gln Glu Thr Gly Ile Ala		
	85	90
Leu Gly Ala Ser Leu Ser Pro Leu Pro Thr Ser Ser Leu Val Pro Arg		
	100	105
Lys Leu Ser Ser Ile Ser Leu Thr Leu His Gln Asn Ser Gln Ala Arg		
	115	120
Ser Leu Asp Arg Pro Leu Ser His Trp Glu Glu Leu Pro Thr Pro Gly		
	130	135
Lys Lys Ala Ala Pro His Glu Gly Gly Arg Val Ser Ser Pro Gly Ser		
	145	150
Pro Pro Val Thr Leu Val Pro Gly Gly Arg Val His Ser Glu Gly Pro		
	165	170
Gly Asn Pro Gly Leu Thr Lys Ser Asn Arg Met Leu Ala Thr Glu Lys		
	180	185
Pro Leu Val Ser Ser Tyr Leu Ala Leu Pro Phe Gln Ser Arg Leu Ala		
	195	200
Gln Ser Ala Pro Val Leu Ala Glu Pro Gly Ser Leu Gly Gln Gly His		
	210	215
Leu Val Ser Val Thr Asp His Met Pro Thr Arg Ala Ser Pro Gly Lys		
	225	230
Gly Lys Pro Arg Ala Arg Gly Ile Pro Arg Pro Arg Gly Arg Leu Gln		
	245	250
Arg Ala Asn Thr Thr Val Asn Leu Thr Ala Met Asp Thr Arg Thr Asp		
	260	265
Ala Ala Arg His Leu Ala Thr Met Ala Thr Asn Arg Pro Ser Leu Ala		
	275	280
Ile Asn Leu Ala Thr Pro Asn Thr Ser Gln Leu Asp Thr Gly Thr Glu		
	290	295
Phe Pro Ala Leu Asp Ile Lys Leu Gly Thr Ala Arg Asp Leu Ser Ser		
	305	310
Val Gly Thr Val Lys Ser Gly Lys Thr Val Asn Leu Ala Thr Ala Gly		
		315
		320

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      325      330      335
Thr Ile Lys Pro Gly Thr Ala Met Asn Leu Thr Thr Val Gly Thr Thr
      340      345      350
Lys Pro Gly Met Val Met Asp Leu Ile Ala Ser Glu Pro Asp Lys Leu
      355      360      365
Gly Lys Ala Met Ala Thr Arg Ser Thr Ala Lys Pro Asp Met Thr Thr
      370      375      380
Glu Gly Ile Ala Met Asp Ser Ala Thr Ser Asp Pro Val Lys Pro Asp
385      390      395      400
Thr Ile Thr Ala Thr Val Gly Thr Ser Arg Leu Glu Thr Ala Met Ala
      405      410      415
Leu Ala Arg Val Asn Arg Ala Lys Leu Gly Thr Ala Lys Asn Ser Leu
      420      425      430
Ala Leu Asp Thr Ser Arg Met Gly Thr Ala Val Gly Ser Val Val Pro
      435      440      445
Val Thr Pro Asp Pro Ala Thr Gly Lys Thr Thr Leu Gly Ser Val Asn
450      455      460
Asn Leu Thr Ile Ser Asp Val Ala Thr Cys Leu Leu Met Pro Ser Arg
465      470      475      480
Ser Thr Asp Leu Ala Leu Asp Asn Thr Asn Ala Ala Met Asp Arg Ala
      485      490      495
Thr Glu Pro Ala Ser Leu Asp Leu Ala Thr Glu Tyr Lys Gly Lys Cys
      500      505      510
Arg Asn Leu Val Gly Asp Gly Leu Gly Cys Arg Glu Gly Glu Val Cys
      515      520      525
Glu Leu Gly Asp Gly Ser Met Lys Pro Met Ser Ile Asn Ser Asn Leu
530      535      540
Leu Gly Tyr Ile Gly Ile Asp Thr Ile Ile Glu Gln Met Arg Lys Lys
545      550      555      560
Thr Met Lys Thr Gly Phe Asp Phe Asn Ile Met Val Val Gly Thr Glu
      565      570      575
Gly Cys Gly Ala Ala Gly Leu Val Ala Gly Ser Thr Lys Asp Pro
      580      585      590
Ile Ser Phe Pro Gln
      595      597

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<210> 3707
 <211> 182
 <212> PRT
 <213> Homo sapiens

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      <400> 3707
Ser Ser Ser Ile Ser Arg Asp Phe Leu Gly Gln Ala Ala Cys Ala Ser
  1      5      10      15
Gly Thr Met Leu Arg Trp Leu Arg Asp Phe Val Leu Pro Thr Ala Ala
      20      25      30
Cys Gln Asp Ala Glu Gln Pro Met Arg Tyr Glu Thr Leu Phe Gln Ala
      35      40      45
Leu Asp Arg Asn Gly Asp Gly Val Val Asp Ile Gly Glu Leu Gln Glu
      50      55      60
Gly Leu Arg Asn Leu Gly Ile Pro Leu Gly Gln Asp Ala Glu Glu Lys
      65      70      75      80
Ile Phe Thr Thr Gly Asp Val Asn Lys Asp Gly Lys Leu Asp Phe Glu
      85      90      95
Glu Phe Met Lys Tyr Leu Lys Asp His Glu Lys Lys Met Lys Leu Ala
      100      105      110
Phe Lys Ser Leu Asp Lys Asn Asn Asp Gly Lys Ile Glu Ala Ser Glu
      115      120      125
Ile Val Gln Ser Leu Gln Thr Leu Gly Leu Thr Ile Ser Glu Gln Gln
      130      135      140
Ala Glu Leu Ile Leu Gln Ser Ile Asp Val Asp Gly Thr Met Thr Val

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145		150		155		160									
Asp	Trp	Asn	Glu	Trp	Arg	Asp	Tyr	Phe	Leu	Phe	Asn	Pro	Val	Thr	Asp
			165						170					175	
Ile	Glu	Glu	Ile	Ile	Arg										
			180		182										

<210> 3708
 <211> 622
 <212> PRT
 <213> Homo sapiens

<400> 3708

Glu	Phe	Arg	Gly	Ala	Gly	Arg	Ala	Asn	Met	Leu	Ala	Pro	Arg	Gly	Ala
1				5					10					15	
Ala	Val	Leu	Leu	Leu	His	Leu	Val	Leu	Gln	Arg	Trp	Leu	Ala	Ala	Gly
			20					25					30		
Ala	Gln	Ala	Thr	Pro	Gln	Val	Phe	Asp	Leu	Leu	Pro	Ser	Ser	Ser	Gln
		35				40					45				
Arg	Leu	Asn	Pro	Gly	Ala	Leu	Leu	Pro	Val	Leu	Thr	Asp	Pro	Ala	Leu
	50					55					60				
Asn	Asp	Leu	Tyr	Val	Ile	Ser	Thr	Phe	Lys	Leu	Gln	Thr	Lys	Ser	Ser
	65				70					75				80	
Ala	Thr	Ile	Phe	Gly	Leu	Tyr	Ser	Ser	Thr	Asp	Asn	Ser	Lys	Tyr	Phe
			85						90					95	
Glu	Phe	Thr	Val	Met	Gly	Arg	Leu	Ser	Lys	Ala	Ile	Leu	Arg	Tyr	Leu
			100					105					110		
Lys	Asn	Asp	Gly	Lys	Val	His	Leu	Val	Val	Phe	Asn	Asn	Leu	Gln	Leu
	115						120				125				
Ala	Asp	Gly	Arg	Arg	His	Arg	Ile	Leu	Leu	Arg	Leu	Ser	Asn	Leu	Gln
	130				135					140					
Arg	Gly	Ala	Gly	Ser	Leu	Glu	Leu	Tyr	Leu	Asp	Cys	Ile	Gln	Val	Asp
	145				150					155				160	
Ser	Val	His	Asn	Leu	Pro	Arg	Ala	Phe	Ala	Gly	Pro	Ser	Gln	Lys	Pro
			165						170					175	
Glu	Thr	Ile	Glu	Leu	Arg	Thr	Phe	Gln	Arg	Lys	Pro	Gln	Asp	Phe	Leu
		180						185					190		
Glu	Glu	Leu	Lys	Leu	Val	Val	Arg	Gly	Ser	Leu	Phe	Gln	Val	Ala	Ser
	195						200				205				
Leu	Gln	Asp	Cys	Phe	Leu	Gln	Gln	Ser	Glu	Pro	Leu	Ala	Ala	Thr	Gly
	210				215					220					
Thr	Gly	Asp	Phe	Asn	Arg	Gln	Phe	Leu	Gly	Gln	Met	Thr	Gln	Leu	Asn
	225			230						235				240	
Gln	Leu	Leu	Gly	Glu	Val	Lys	Asp	Leu	Leu	Arg	Gln	Glu	Val	Asn	Glu
			245					250						255	
Thr	Ser	Phe	Leu	Arg	Asn	Thr	Ile	Thr	Glu	Cys	Gln	Ala	Cys	Gly	Pro
		260						265					270		
Leu	Lys	Phe	Gln	Ser	Pro	Thr	Pro	Ser	Thr	Val	Val	Pro	Pro	Ala	Ser
	275						280					285			
Pro	Ala	Pro	Pro	Thr	Arg	Pro	Pro	Arg	Arg	Cys	Asp	Ser	Asn	Pro	Cys
	290				295					300					
Phe	Arg	Gly	Val	Gln	Cys	Thr	Asp	Ser	Arg	Asp	Gly	Phe	Gln	Cys	Gly
	305				310					315				320	
Pro	Cys	Pro	Glu	Gly	Tyr	Thr	Gly	Asn	Gly	Ile	Thr	Cys	Ile	Asp	Val
			325					330						335	
Asp	Glu	Cys	Lys	Tyr	His	Pro	Cys	Tyr	Pro	Gly	Glu	His	Cys	Ile	Asn
		340						345					350		
Leu	Ser	Pro	Gly	Phe	Arg	Cys	Asp	Ala	Cys	Pro	Val	Gly	Phe	Thr	Gly
		355					360					365			
Pro	Met	Val	Gln	Gly	Val	Gly	Ile	Ser	Phe	Ala	Lys	Ser	Asn	Lys	Gln
	370					375					380				
Val	Cys	Thr	Asp	Ile	Asp	Glu	Cys	Arg	Asn	Gly	Ala	Cys	Val	Pro	Asn

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385          390          395          400
Ser Ile Cys Val Asn Thr Leu Gly Ser Tyr Arg Cys Gly Pro Cys Lys
          405          410          415
Pro Gly Tyr Thr Gly Asp Gln Ile Arg Gly Cys Lys Ala Glu Arg Asn
          420          425          430
Cys Arg Asn Pro Glu Leu Asn Pro Cys Ser Val Asn Ala Gln Cys Ile
          435          440          445
Glu Glu Arg Gln Gly Asp Val Thr Cys Val Cys Gly Val Gly Trp Ala
          450          455          460
Gly Asp Gly Tyr Ile Cys Gly Lys Asp Val Asp Ile Asp Ser Tyr Pro
465          470          475          480
Asp Glu Glu Leu Pro Cys Ser Ala Arg Asn Cys Lys Lys Asp Asn Cys
          485          490          495
Lys Tyr Val Pro Asn Ser Gly Gln Glu Asp Ala Asp Arg Asp Gly Ile
          500          505          510
Gly Asp Ala Cys Asp Glu Asp Ala Asp Gly Asp Gly Ile Leu Asn Glu
          515          520          525
Gln Asp Asn Cys Val Leu Ile His Asn Val Asp Gln Arg Asn Ser Asp
          530          535          540
Lys Asp Ile Phe Gly Asp Ala Cys Asp Asn Cys Leu Ser Val Leu Asn
545          550          555          560
Asn Asp Gln Lys Asp Thr Asp Gly Asp Gly Arg Gly Asp Ala Cys Asp
          565          570          575
Asp Asp Met Asp Gly Asp Gly Ile Lys Asn Ile Leu Asp Asn Cys Pro
          580          585          590
Lys Phe Pro Asn Arg Asp Gln Arg Asp Lys Asp Gly Asp Gly Val Gly
          595          600          605
Asp Ala Cys Asp Ser Cys Pro Asp Val Ser Asn Pro Asn Gln
610          615          620          622

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<210> 3709
 <211> 91
 <212> PRT
 <213> Homo sapiens

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<400> 3709
Thr Gln Ala Met Glu Gly Leu Leu His Tyr Ile Asn Pro Ala His Ala
  1          5          10          15
Ile Ser Leu Leu Ser Ala Leu Asn Glu Glu Arg Leu Lys Gly Gln Leu
          20          25          30
Cys Asp Val Leu Leu Ile Val Gly Asp Gln Lys Phe Arg Ala His Lys
          35          40          45
Asn Val Leu Ala Ala Ser Ser Glu Tyr Phe Gln Ser Leu Phe Thr Asn
          50          55          60
Lys Glu Asn Glu Ser Gln Thr Val Phe Gln Leu Asp Phe Cys Glu Pro
65          70          75          80
Asp Ala Phe Asp Asn Val Leu Asn Tyr Ile Tyr
          85          90          91

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<210> 3710
 <211> 147
 <212> PRT
 <213> Homo sapiens

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<400> 3710
Phe Gly Met Leu Lys Asn Lys Gly His Ser Ser Lys Lys Asp Asn Leu
  1          5          10          15
Ala Val Asn Ala Val Ala Leu Gln Asp His Ile Leu His Asp Leu Gln

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      20      25      30
Leu Arg Asn Leu Ser Val Ala Asp His Ser Lys Thr Gln Val Gln Lys
      35      40      45
Lys Glu Asn Lys Ser Leu Lys Arg Asp Thr Lys Ala Ile Ile Asp Thr
      50      55      60
Gly Leu Lys Lys Thr Thr Gln Cys Pro Lys Leu Glu Asp Ser Glu Lys
      65      70      75      80
Glu Tyr Val Leu Asp Pro Lys Pro Pro Pro Leu Thr Leu Ala Gln Lys
      85      90      95
Leu Gly Leu Ile Gly Pro Pro Pro Pro Pro Leu Ser Ser Asp Glu Trp
      100      105      110
Glu Lys Val Lys Gln Arg Ser Leu Leu Gln Gly Asp Ser Val Gln Pro
      115      120      125
Cys Pro Ile Cys Lys Glu Glu Phe Glu Leu Arg Pro Gln Val Phe Ser
      130      135      140
Ile Arg Gly
145      147

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<210> 3711
<211> 256
<212> PRT
<213> Homo sapiens

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      <400> 3711
Ser Leu Glu Met Ser Ser Asp Gly Glu Pro Leu Ser Arg Met Asp Ser
  1      5      10      15
Glu Asp Ser Ile Ser Ser Thr Ile Met Asp Val Asp Ser Thr Ile Ser
      20      25      30
Ser Gly Arg Ser Thr Pro Ala Met Met Asn Gly Gln Gly Ser Thr Thr
      35      40      45
Ser Ser Ser Lys Asn Ile Ala Tyr Asn Cys Cys Trp Asp Gln Cys Gln
      50      55      60
Ala Cys Phe Asn Ser Ser Pro Asp Leu Ala Asp His Ile Arg Ser Ile
      65      70      75      80
His Val Asp Gly Gln Arg Gly Gly Val Phe Val Cys Leu Trp Lys Gly
      85      90      95
Cys Lys Val Tyr Asn Thr Pro Ser Thr Ser Gln Ser Trp Leu Gln Arg
      100      105      110
His Met Leu Thr His Ser Gly Asp Lys Pro Phe Lys Cys Val Val Gly
      115      120      125
Gly Cys Asn Ala Ser Phe Ala Ser Gln Gly Gly Leu Ala Arg His Val
      130      135      140
Pro Thr His Phe Ser Gln Gln Asn Ser Ser Lys Val Ser Ser Gln Pro
145      150      155      160
Lys Ala Lys Glu Glu Ser Pro Ser Lys Ala Gly Met Asn Lys Arg Arg
      165      170      175
Lys Leu Lys Asn Lys Arg Arg Arg Ser Leu Ala Arg Pro His Asp Phe
      180      185      190
Phe Asp Ala Gln Thr Leu Asp Ala Ile Arg His Arg Ala Ile Cys Phe
      195      200      205
Asn Leu Ser Ala His Ile Glu Ser Leu Gly Lys Gly His Ser Val Val
      210      215      220
Phe His Ser Thr Val Ser Ile Leu Leu Phe Phe Gln Ile Lys Tyr Lys
225      230      235      240
Thr Leu Gln Lys Asn Ile Ser Thr Ile Ile Ser Lys Ser Leu Lys Ile
      245      250      255      256

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<210> 3712
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 3712
 Arg Ala Thr Trp His Asn Ala Gly Lys Glu Arg Glu Ala Val Gln Leu
 1 5 10 15
 Met Ala Gly Ala Glu Lys Arg Val Lys Ala Ser His Ser Phe Leu Arg
 20 25 30
 Gly Leu Phe Gly Gly Asn Thr Arg Ile Glu Glu Ala Cys Glu Met Tyr
 35 40 45
 Thr Arg Ala Ala Asn Met Phe Lys Met Ala Lys Asn Trp Ser Ala Ala
 50 55 60
 Gly Asn Ala Phe Cys Gln Ala Ala Lys Leu His Met Gln Leu Gln Ser
 65 70 75 80
 Lys His Asp Ser Ala Thr Ser Phe Val Asp Ala Gly Asn Ala Tyr Lys
 85 90 95
 Lys Ala Asp Pro Gln Gly Lys Thr Ala Arg His Val Ala Cys Tyr Leu
 100 105 110
 Cys Val
 114

<210> 3713
 <211> 318
 <212> PRT
 <213> Homo sapiens

<400> 3713
 Gly Ala Ala Ala Thr Ala Cys Ser Ser Ser Ser Ser Ser Ser Gly Ala
 1 5 10 15
 Pro Ala Thr Trp Ala Ala His Gly Pro Gly Lys Asp Val Ala Ser Pro
 20 25 30
 Ser Ser Val Ser Leu Ser Pro Arg Arg Ser Arg Leu Leu Val Leu Arg
 35 40 45
 Cys Gly Leu Arg Arg Asn Pro Glu Arg Pro Ser Ser Ser Pro Ala Leu
 50 55 60
 Arg Arg Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Gly
 65 70 75 80
 Phe Leu Leu Ser Pro Gly Pro Glu Arg Gly Val Gly Gly Gly Arg Phe
 85 90 95
 Gly Arg Arg Leu Ala Leu Leu Trp Ala Ala Ala Leu Gly His Val Val
 100 105 110
 Ser Gly Lys Val Met Ser Arg Arg Ala Pro Gly Ser Arg Leu Ser Ser
 115 120 125
 Gly Gly Gly Gly Gly Gly Thr Asn Tyr Ser Arg Ser Trp Asn Asp Trp
 130 135 140
 Gln Pro Arg Thr Asp Ser Ala Ser Ala Asp Pro Gly Asn Leu Lys Tyr
 145 150 155 160
 Ser Ser Ser Arg Asp Arg Gly Gly Ser Ser Tyr Gly Leu Gln Pro
 165 170 175
 Ser Asn Ser Ala Val Val Ser Arg Gln Arg His Asp Asp Thr Arg Val
 180 185 190
 His Ala Asp Ile Gln Asn Asp Glu Lys Gly Gly Tyr Ser Val Asn Gly
 195 200 205
 Gly Ser Gly Glu Asn Thr Tyr Gly Arg Lys Ser Leu Gly Gln Glu Leu
 210 215 220
 Arg Val Asn Asn Val Thr Ser Pro Glu Phe Thr Ser Val Gln His Gly
 225 230 235 240
 Ser Arg Ala Leu Ala Thr Lys Asp Met Arg Lys Ser Gln Glu Arg Ser

245 250 255
 Met Ser Tyr Cys Asp Glu Ser Arg Leu Ser Tyr Leu Leu Arg Arg Ile
 260 265 270
 Thr Arg Glu Asn Asp Arg Asp Arg Arg Leu Ala Thr Val Lys Gln Leu
 275 280 285
 Lys Glu Phe Ile Gln Gln Pro Glu Asn Lys Leu Val Leu Val Lys Gln
 290 295 300
 Leu Asp Ile Leu Ala Ala Val His Asp Val Leu Asn Glu Arg
 305 310 315 318

<210> 3714
 <211> 74
 <212> PRT
 <213> Homo sapiens

<400> 3714
 Ile Phe Ala Leu Lys Ser Pro Ser Tyr Leu Leu Pro Cys Cys Thr Pro
 1 5 10 15
 Glu Gly Lys Met Asp His Lys Gln Leu Cys Trp Ser His Pro Gln Lys
 20 25 30
 Ser Gly Gln Ser Ser Arg Ser Cys Ile Cys Ser Asn Gln His Gly
 35 40 45
 Leu Ile Trp Lys Tyr Ser Leu Asn Met Cys Leu Gln Cys Cys His Gln
 50 55 60
 Tyr Val Lys Asp Ile Gly Phe Ile Lys Leu
 65 70 74

<210> 3715
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 3715
 Leu Cys Thr Leu Ser Pro Gly Ile Ser Gly Thr Ala Gly Ser Cys Leu
 1 5 10 15
 Thr Thr Glu Pro Gly Thr Glu Leu Gly Thr Ser Phe Ala Gln Asn Gly
 20 25 30
 Phe Tyr His Glu Ala Val Val Leu Phe Thr Gln Ala Leu Lys Leu Asn
 35 40 45
 Pro Gln Asp His Arg Leu Phe Gly Asn Arg Ser Phe Cys His Glu Arg
 50 55 60
 Leu Gly Gln Pro Ala Trp Ala Leu Ala Asp Ala Gln Val Ala Leu Thr
 65 70 75 80
 Leu Arg Pro Gly Trp Pro Arg Gly Leu Phe Arg Leu Gly Lys Ala Leu
 85 90 95
 Met Gly Leu Gln Arg Phe Arg Glu Ala Ala Val Phe Gln Glu Thr
 100 105 110
 Leu Arg Gly Gly Ser Gln Pro Asp Ala Ala Arg Glu Leu Arg Ser Cys
 115 120 125
 Leu Leu His Leu Thr Leu Gln Gly Gln Arg Gly Gly Ile Cys Ala Pro
 130 135 140
 Pro Leu Ser Pro Gly Ala Leu Gln Pro Leu Pro His Ala Glu Leu Ala
 145 150 155 160
 Pro Ser Gly Leu Pro Ser Leu Arg Cys Pro Arg Ser Thr Ala Leu Arg
 165 170 175
 Ser Pro Gly Leu Ser Pro Leu Leu His
 180 185

<210> 3716
 <211> 74
 <212> PRT
 <213> Homo sapiens

<400> 3716
 Gln Gly Leu Pro Ser Thr Met Val Lys Leu Gly Cys Ser Phe Ser Gly
 1 5 10 15
 Lys Pro Gly Lys Asp Pro Gly Asp Gln Asp Gly Ala Ala Met Asp Ser
 20 25 30
 Val Pro Leu Ile Ser Pro Leu Asp Ile Ser Gln Leu Gln Pro Pro Leu
 35 40 45
 Pro Asp Gln Val Val Ile Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser
 50 55 60
 Pro Asp Gln Gln Asn Tyr Thr Lys Ser Arg
 65 70 74

<210> 3717
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 3717
 Gly Ala Gly Cys Thr Ser Pro Gly Leu Trp Ala Arg Lys Ala Ala Ala
 1 5 10 15
 Arg Cys Leu Pro Thr Tyr Pro Ser Arg Ala Gln Pro Ser Asn Val Gly
 20 25 30
 Arg Arg Arg Arg Arg Arg Pro Gly Leu Gly Ala Leu Ala Ala Gly Val
 35 40 45
 Pro Ala Met Ala Glu Ser Val Glu Arg Leu Gln Gln Arg Val Gln Glu
 50 55 60
 Leu Glu Arg Glu Leu Ala Gln Glu Arg Ser Leu Gln Val Pro Arg Ser
 65 70 75 80
 Gly Asp Gly Gly Gly Gly Arg Val Arg Ile Glu Lys Met Ser Ser Glu
 85 90 95
 Val Val Asp Ser Asn Pro Tyr Ser Arg Leu Met Ala Leu Lys Arg Met
 100 105 110
 Gly Ile Val Ser Asp Tyr Glu Lys Ile Arg Thr Phe Ala Val Ala Ile
 115 120 125
 Val Gly Val Gly Gly Val Gly Ser Val Thr Ala Glu Met Leu Thr Arg
 130 135 140
 Cys Gly Ile Gly Lys Leu Leu Leu Phe Asp Tyr Asp Lys Val Glu Leu
 145 150 155 160
 Ala Asn Met Asn Arg Leu Phe Phe Gln Pro His Gln Ala Gly Leu Ser
 165 170 175
 Lys Val Gln Ala Ala Gly His Thr Pro Glu Glu
 180 185 187

<210> 3718
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 3718
 Arg Gly Ala Gly Gly Arg Ala Gly Gly Arg Ala Asp Gly Gln Pro Asn

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      1           5           10           15
Met Ala Asp Gln Arg Gln Arg Ser Leu Ser Thr Ser Gly Glu Ser Leu
      20           25           30
Tyr His Val Leu Gly Leu Asp Lys Asn Ala Thr Ser Asp Asp Ile Lys
      35           40           45
Lys Ser Tyr Arg Lys Leu Ala Leu Lys Tyr His Pro Asp Lys Asn Pro
      50           55           60
Asp Asn Pro Glu Ala Ala Asp Lys Phe Lys Glu Ile Asn Asn Ala His
      65           70           75           80
Ala Ile Leu Thr Asp Ala Thr Lys Arg Asn Ile Tyr Asp Lys Tyr Gly
      85           90           95
Ser Leu Gly Leu Tyr Val Ala Glu Gln Phe Gly Glu Glu Asn Val Asn
      100          105          110
Thr Tyr Phe Val Leu Ser Ser Trp Trp Ala Lys Ala Leu Phe Val Phe
      115          120          125
Cys Gly Leu Leu Thr Cys Cys Tyr Cys Cys Cys Cys Leu Cys Cys Cys
      130          135          140
Phe Asn Cys Cys Cys Gly Lys Cys Lys Pro Lys Ala Pro Glu Gly Glu
      145          150          155          160
Glu Thr Glu Phe Tyr Val Ser Pro Glu Asp Leu Glu Ala Gln Leu Gln
      165          170          175
Ser Asp Glu Arg Glu Ala Thr Asp Thr Pro Ile Val Ile Gln Pro Ala
      180          185          190
Ser Ala Thr Glu Pro
      195          197

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<210> 3719

<211> 727

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(723)

<223> Xaa = any amino acid or nothing

<400> 3719

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Ser Gly Gly Val Arg Met Gly Ser Arg Ala Asp Gly Pro Arg Thr Ser
      1           5           10           15
Gly His Val Thr Gly Lys Met Ala Val Phe Pro Trp His Ser Arg Asn
      20           25           30
Arg Asn Tyr Lys Ala Glu Phe Ala Ser Cys Arg Leu Glu Ala Val Pro
      35           40           45
Leu Glu Phe Gly Asp Tyr His Pro Leu Lys Pro Ile Thr Val Thr Glu
      50           55           60
Ser Lys Thr Lys Lys Val Asn Arg Lys Gly Ser Thr Ser Ser Thr Ser
      65           70           75           80
Ser Ser Ser Ser Ser Ser Val Val Asp Pro Leu Ser Ser Val Leu Asp
      85           90           95
Gly Thr Asp Pro Leu Ser Met Phe Ala Ala Thr Ala Asp Pro Ala Ala
      100          105          110
Leu Ala Ala Ala Met Asp Ser Ser Arg Arg Lys Arg Asp Arg Asp Asp
      115          120          125
Asn Ser Val Val Gly Ser Asp Phe Glu Pro Trp Thr Asn Lys Arg Gly
      130          135          140
Glu Ile Leu Ala Arg Tyr Thr Thr Thr Glu Lys Leu Ser Ile Asn Leu
      145          150          155          160
Phe Met Gly Ser Glu Lys Gly Lys Ala Gly Thr Ala Thr Leu Ala Met
      165          170          175
Ser Glu Lys Val Arg Thr Arg Leu Glu Glu Leu Asp Asp Phe Glu Glu
      180          185          190
Gly Ser Gln Lys Glu Leu Leu Asn Leu Thr Gln Gln Asp Tyr Val Asn

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195	200	205
Arg Ile Glu Glu Leu Asn Gln Ser Leu Lys Asp Ala Trp Ala Ser Asp		
210	215	220
Gln Lys Val Lys Ala Pro Lys Asn Val His Pro Gly Lys Leu Val Tyr		
225	230	235
Glu Arg Ile Phe Ser Met Cys Val Asp Ser Arg Ser Val Leu Pro Asp		240
	245	250
His Phe Ser Pro Glu Asn Ala Asn Asp Thr Ala Lys Glu Thr Cys Leu		255
	260	265
Asn Trp Phe Phe Lys Ile Ala Ser Ile Arg Glu Leu Ile Pro Arg Phe		270
	275	280
Tyr Val Glu Ala Ser Ile Leu Lys Cys Asn Lys Phe Leu Ser Lys Thr		285
	290	295
Gly Ile Ser Glu Cys Leu Pro Arg Leu Thr Cys Met Ile Arg Gly Ile		300
305	310	315
Gly Asp Pro Leu Gly Ser Val Tyr Ala Arg Ala Tyr Leu Ser Arg Val		320
	325	330
Gly Met Glu Val Ala Pro His Leu Lys Glu Thr Leu Asn Lys Asn Phe		335
	340	345
Phe Asp Phe Leu Leu Thr Phe Lys Gln Ile His Gly Asp Thr Val Gln		350
	355	360
Asn Gln Leu Val Val Gln Gly Val Glu Leu Pro Ser Tyr Leu Pro Leu		365
	370	375
Tyr Pro Pro Ala Met Asp Trp Ile Phe Gln Cys Ile Ser Tyr His Ala		380
385	390	395
Pro Glu Ala Leu Leu Thr Glu Met Met Glu Arg Cys Lys Lys Leu Gly		400
	405	410
Asn Asn Ala Leu Leu Leu Asn Ser Val Met Ser Ala Phe Arg Ala Glu		415
	420	425
Phe Ile Ala Thr Arg Ser Met Asp Phe Ile Gly Met Ile Lys Glu Cys		430
	435	440
Asp Glu Ser Gly Phe Pro Lys His Leu Leu Phe Arg Ser Leu Gly Leu		445
	450	455
Asn Leu Ala Leu Ala Asp Pro Pro Glu Ser Asp Arg Leu Gln Ile Leu		460
465	470	475
Asn Glu Ala Trp Lys Val Ile Thr Lys Leu Lys Asn Pro Gln Asp Tyr		480
	485	490
Ile Asn Cys Ala Glu Val Trp Val Glu Tyr Thr Cys Lys His Phe Thr		495
	500	505
Lys Arg Glu Val Asn Thr Val Leu Ala Asp Val Ile Lys His Met Thr		510
	515	520
Pro Asp Arg Ala Phe Glu Asp Ser Tyr Pro Gln Leu Gln Leu Ile Ile		525
	530	535
Lys Lys Val Ile Ala His Phe His Asp Phe Ser Val Leu Phe Ser Val		540
545	550	555
Glu Lys Phe Leu Pro Phe Leu Asp Met Phe Gln Lys Glu Ser Val Arg		560
	565	570
Val Glu Val Cys Lys Cys Ile Arg Thr Pro Leu Ser Ser Ile Asn Lys		575
	580	585
Ser Pro Pro Arg Thr Arg Ser Ser Xaa Met Pro Phe Cys Met Phe Ala		590
	595	600
Arg Pro Cys Met Thr Leu Cys Asn Ala Leu Thr Leu Glu Asp Glu Lys		605
	610	615
Arg Met Leu Ser Tyr Leu Ile Asn Gly Phe Ile Lys Met Val Ser Phe		620
625	630	635
Gly Arg Asp Phe Glu Gln Gln Leu Ser Phe Tyr Val Glu Ser Arg Ser		640
	645	650
Met Phe Cys Asn Leu Glu Pro Val Leu Val Gln Leu Ile His Ser Val		655
	660	665
Asn Arg Leu Ala Met Glu Thr Arg Lys Val Met Lys Gly Asn His Ser		670
	675	680
Arg Lys Thr Ala Ala Phe Val Arg Ser Trp Gly Ala Tyr Trp Phe Ile		685
	690	695
Thr Ile Pro Ser Leu Ala Gly Ile Phe Thr Arg Leu Asn Leu Tyr Leu		700

705
His Ser Gly
723

710

715

720

<210> 3720
<211> 92
<212> PRT
<213> Homo sapiens

<400> 3720
Glu Asn Leu Phe Arg Ala Gly Phe Ala Phe Ser Leu Leu Arg Ser Ser
1 5 10 15
Phe Tyr Ile Ser Lys Thr Tyr Cys Ser Trp Phe Ser Asn Leu Ile Ser
20 25 30
Gly Ser Leu Ala Asp Phe Asn Ser Lys Gly Thr Arg Asp Tyr Ser Pro
35 40 45
Arg Gln Met Ala Val Arg Glu Lys Val Phe Asp Val Ile Ile Arg Cys
50 55 60
Phe Lys Arg His Gly Ala Glu Val Ile Asp Thr Pro Val Phe Glu Leu
65 70 75 80
Lys Val Arg Asn Gly Gln Glu Glu Thr Thr Trp
85 90 91

<210> 3721
<211> 103
<212> PRT
<213> Homo sapiens

<400> 3721
Pro Ser Cys Leu Thr Cys Val Gly His Cys Ser Ile Gly Gly Ser Cys
1 5 10 15
Thr Met Ile Gly Ile Met Met Pro Glu Cys His Cys Ser Leu His Met
20 25 30
Thr Gly Pro Arg Cys Glu Glu His Val Phe Ile Leu Gln Gln Pro Gly
35 40 45
His Ile Ala Ser Ile Leu Ile Pro Leu Leu Val Leu Leu Leu Ala
50 55 60
Leu Val Ala Gly Val Val Phe Trp His Lys Arg Arg Val Gln Gly Ala
65 70 75 80
Lys Gly Phe Gln His Gln Arg Met Thr Asn Gly Ala Met Asn Val Glu
85 90 95
Ile Gly Asn Pro Thr Tyr Lys
100 103

<210> 3722
<211> 216
<212> PRT
<213> Homo sapiens

<400> 3722
Met Glu Leu Val Ala Gly Cys Tyr Glu Gln Val Leu Phe Gly Phe Ala
1 5 10 15
Val His Pro Glu Pro Glu Ala Cys Gly Asp His Glu Gln Trp Thr Leu
20 25 30
Val Ala Asp Phe Thr His His Ala His Thr Ala Ser Leu Ser Ala Val

```

      35      40      45
Ala Val Asn Ser Arg Phe Val Val Thr Gly Ser Lys Asp Glu Thr Ile
  50      55      60
His Ile Tyr Asp Met Lys Lys Lys Ile Glu His Gly Ala Leu Val His
  65      70      75      80
His Ser Gly Thr Ile Thr Cys Leu Lys Phe Tyr Gly Asn Arg His Leu
      85      90      95
Ile Ser Gly Ala Glu Asp Gly Leu Ile Cys Ile Trp Asp Ala Lys Lys
      100      105      110
Trp Glu Cys Leu Lys Ser Ile Lys Ala His Lys Gly Gln Val Thr Phe
      115      120      125
Leu Ser Ile His Pro Ser Gly Lys Leu Ala Leu Ser Val Gly Thr Asp
      130      135      140
Lys Thr Leu Arg Thr Trp Asn Leu Val Glu Gly Arg Ser Ala Phe Ile
      145      150      155      160
Lys Asn Ile Lys Gln Asn Ala His Ile Val Glu Trp Ser Pro Arg Gly
      165      170      175
Glu Gln Tyr Val Val Ile Ile Gln Asn Lys Ile Asp Ile Tyr Gln Leu
      180      185      190
Asp Thr Ala Ser Ile Ser Gly Thr Ile Thr Asn Glu Lys Arg Ile Ser
      195      200      205
Ser Val Lys Phe Leu Ser Glu Ser
      210      215 216

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<210> 3723
 <211> 68
 <212> PRT
 <213> Homo sapiens

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      <400> 3723
Met Glu Leu Ser Asp Asn Arg Arg Ser Gly Gly Leu Glu Gly Leu Ala
  1      5      10      15
Glu Lys Cys Pro Asn Leu Thr Tyr Leu Asn Leu Ser Gly Asn Lys Ile
      20      25      30
Lys Asp Leu Ser Thr Val Glu Ala Leu Val Ser Gly Thr Val Leu Ser
      35      40      45
Leu Asp Leu Leu Phe Leu Val Lys Phe Ser Glu Ile Cys Leu Cys Leu
      50      55      60
Leu Ile Ser Ile
      65      68

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<210> 3724
 <211> 134
 <212> PRT
 <213> Homo sapiens

```

      <400> 3724
Val Asp Arg Gly Thr Glu Ala Trp Gln Arg Asp Pro Ala Phe Ser Gly
  1      5      10      15
Leu Gln Arg Val Gly Gly Val Asp Val Ser Phe Val Lys Gly Asp Ser
      20      25      30
Val Arg Ala Cys Ala Ser Leu Gly Val Leu Ser Phe Pro Glu Leu Glu
      35      40      45
Val Val Tyr Glu Glu Ser Arg Met Val Ser Leu Thr Ala Pro Tyr Val
      50      55      60
Ser Gly Phe Leu Ala Phe Arg Glu Val Pro Phe Leu Leu Glu Leu Val
      65      70      75      80
Gln Gln Leu Arg Glu Lys Glu Pro Gly Leu Met Pro Gln Val Leu Leu

```

				85					90				95				
Val	Asp	Gly	Asn	Gly	Val	Leu	His	His	Arg	Gly	Phe	Gly	Val	Ala	Cys		
			100					105					110				
His	Leu	Gly	Val	Leu	Thr	Asp	Leu	Pro	Cys	Val	Gly	Val	Ala	Lys	Lys		
			115				120						125				
Leu	Leu	Gln	Val	Asp	Gly												
			130				134										

<210> 3725

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3725

Val	Asp	Arg	Gly	Thr	Glu	Ala	Trp	Gln	Arg	Asp	Pro	Ala	Phe	Ser	Gly		
1				5					10					15			
Leu	Gln	Arg	Val	Gly	Gly	Val	Asp	Val	Ser	Phe	Val	Lys	Gly	Asp	Ser		
			20				25						30				
Val	Arg	Ala	Cys	Ala	Ser	Leu	Gly	Val	Leu	Ser	Phe	Pro	Glu	Leu	Glu		
		35					40					45					
Val	Val	Tyr	Glu	Glu	Ser	Arg	Met	Val	Ser	Leu	Thr	Ala	Pro	Tyr	Val		
	50					55					60						
Ser	Gly	Phe	Leu	Ala	Phe	Arg	Glu	Val	Pro	Phe	Leu	Leu	Glu	Leu	Val		
	65				70					75				80			
Gln	Gln	Leu	Arg	Glu	Lys	Glu	Pro	Gly	Leu	Met	Pro	Gln	Val	Leu	Leu		
				85					90					95			
Val	Asp	Gly	Asn	Gly	Val	Leu	His	His	Arg	Gly	Phe	Gly	Val	Ala	Cys		
			100					105					110				
His	Leu	Gly	Val	Leu	Thr	Asp	Leu	Pro	Cys	Val	Gly	Val	Ala	Lys	Lys		
			115				120						125				
Leu	Leu	Gln	Val	Asp	Gly												
			130				134										

<210> 3726

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3726

Ser	Ser	Asp	Asp	Arg	Ser	Leu	Phe	Arg	Arg	Leu	Lys	Leu	Asn	Tyr	Ala		
1				5					10					15			
Ile	Phe	Asp	Glu	Gly	His	Met	Leu	Lys	Asn	Met	Gly	Ser	Ile	Arg	Tyr		
			20					25					30				
Gln	His	Leu	Met	Thr	Ile	Asn	Ala	Asn	Asn	Arg	Leu	Leu	Leu	Thr	Gly		
			35				40					45					
Thr	Pro	Val	Gln	Asn	Asn	Leu	Leu	Glu	Leu	Met	Ser	Leu	Leu	Asn	Phe		
	50					55					60						
Val	Met	Pro	His	Met	Phe	Ser	Ser	Ser	Thr	Ser	Glu	Ile	Arg	Arg	Met		
	65				70				75					80			
Phe	Ser	Ser	Lys	Thr	Lys	Ser	Ala	Asp	Glu	Gln	Ser	Ile	Tyr	Glu	Lys		
				85				90					95				
Glu	Arg	Ile	Ala	His	Ala	Lys	Gln	Ile	Ile	Lys	Pro	Phe	Ile	Leu	Arg		
			100				105					110					
Arg	Val	Lys	Glu	Glu	Val	Leu	Lys	Gln	Leu	Pro	Pro	Lys	Lys	Asp	Arg		
			115				120					125					
Ile	Glu	Leu	Cys	Ala	Met	Ser	Glu	Lys	Gln	Glu	Gln	Leu	Tyr	Leu	Gly		
			130				135				140				144		

<210> 3727
 <211> 126
 <212> PRT
 <213> Homo sapiens

 <221> misc_feature
 <222> (1)...(126)
 <223> Xaa = any amino acid or nothing

<400> 3727
 Arg Ile Pro Arg Gly Lys Ala Cys Xaa Thr Val Leu Gly Arg Ser Thr
 1 5 10 15
 Gly Glu Leu Glu Gly Phe Ala Ser Ser Arg Leu Pro Pro Gln Pro Cys
 20 25 30
 Gly Trp Gly Gln Ser Ser Asp Leu Leu Ser Arg Ile Asp Leu Asp Glu
 35 40 45
 Leu Met Lys Lys Asp Glu Pro Pro Leu Asp Phe Pro Asp Thr Leu Glu
 50 55 60
 Gly Phe Glu Tyr Ala Phe Asn Glu Lys Gly Gln Leu Arg His Ile Lys
 65 70 75 80
 Thr Gly Glu Pro Phe Val Phe Asn Tyr Arg Glu His Leu His Arg Trp
 85 90 95
 Asn Gln Lys Arg Tyr Glu Ala Leu Gly Glu Ile Ile Thr Lys Tyr Val
 100 105 110
 Tyr Glu Leu Leu Glu Lys Asp Cys Asn Ser Lys Lys Val Ser
 115 120 125 126

<210> 3728
 <211> 819
 <212> PRT
 <213> Homo sapiens

 <221> misc_feature
 <222> (1)...(815)
 <223> Xaa = any amino acid or nothing

<400> 3728
 Glu Ile Ala Gly Ala Ala Ala Glu Asn Met Leu Gly Ser Leu Leu Cys
 1 5 10 15
 Leu Pro Gly Ser Gly Ser Val Leu Leu Asp Pro Cys Thr Gly Ser Thr
 20 25 30
 Ile Ser Glu Thr Thr Ser Glu Ala Trp Ser Val Glu Val Leu Pro Ser
 35 40 45
 Asp Ser Glu Ala Pro Asp Leu Lys Gln Glu Glu Arg Leu Gln Glu Leu
 50 55 60
 Glu Ser Cys Ser Gly Leu Gly Ser Thr Ser Asp Asp Thr Asp Val Arg
 65 70 75 80
 Glu Val Ser Ser Arg Pro Ser Thr Pro Gly Leu Ser Val Val Ser Gly
 85 90 95
 Ile Ser Ala Thr Ser Glu Asp Ile Pro Asn Lys Ile Glu Asp Leu Arg
 100 105 110
 Ser Glu Cys Ser Ser Asp Phe Gly Gly Lys Asp Ser Val Thr Ser Pro
 115 120 125
 Asp Met Asp Glu Ile Thr His Asp Phe Leu Tyr Ile Leu Gln Pro Lys
 130 135 140
 Gln His Phe Gln His Ile Glu Ala Glu Ala Asp Met Arg Ile Gln Leu

145					150					155				160
Ser	Ser	Ser	Ala	His	Gln	Leu	Thr	Ser	Pro	Pro	Ser	Gln	Ser	Glu
				165					170					175
Leu	Leu	Ala	Met	Phe	Asp	Pro	Leu	Ser	Ser	His	Glu	Gly	Ala	Ser
			180						185					190
Val	Val	Arg	Pro	Lys	Val	His	Tyr	Ala	Arg	Pro	Ser	His	Pro	Pro
			195				200					205		
Asp	Pro	Pro	Ile	Leu	Glu	Gly	Ala	Val	Gly	Gly	Asn	Glu	Ala	Arg
	210					215					220			
Pro	Asn	Phe	Gly	Ser	Pro	Met	Phe	Xaa	Leu	Pro	Ala	Glu	Met	Glu
	225				230					235				240
Phe	Lys	Gln	Arg	His	Ser	Tyr	Thr	Pro	Glu	Arg	Leu	Val	Arg	Ser
				245					250					255
Ser	Ser	Asp	Ile	Val	Ser	Ser	Val	Arg	Arg	Pro	Met	Ser	Asp	Pro
			260					265					270	
Trp	Asn	Arg	Arg	Pro	Gly	Asn	Glu	Glu	Arg	Glu	Leu	Pro	Pro	Ala
	275					280						285		
Ala	Ile	Gly	Ala	Thr	Ser	Leu	Val	Ala	Ala	Pro	His	Ser	Ser	Ser
	290					295					300			
Ser	Pro	Ser	Lys	Asp	Ser	Ser	Arg	Gly	Glu	Thr	Glu	Glu	Arg	Lys
	305				310				315					320
Ser	Asp	Asp	Glu	Lys	Ser	Asp	Arg	Asn	Arg	Pro	Trp	Trp	Arg	Lys
			325					330					335	
Phe	Val	Ser	Ala	Met	Pro	Lys	Ala	Pro	Ile	Pro	Phe	Arg	Lys	Lys
			340					345					350	
Lys	Gln	Glu	Lys	Asp	Lys	Asp	Asp	Leu	Gly	Pro	Asp	Arg	Phe	Ser
	355					360					365			
Leu	Thr	Asp	Asp	Pro	Ser	Pro	Arg	Leu	Ser	Ala	Gln	Ala	Gln	Val
	370					375					380			
Glu	Asp	Ile	Leu	Asp	Lys	Tyr	Arg	Asn	Ala	Ile	Lys	Arg	Thr	Ser
	385				390				395					400
Ser	Asp	Gly	Ala	Met	Ala	Asn	Tyr	Glu	Ser	Thr	Glu	Val	Met	Gly
			405					410					415	
Gly	Glu	Ser	Ala	His	Asp	Ser	Pro	Arg	Asp	Glu	Ala	Leu	Gln	Asn
			420					425					430	
Ser	Ala	Asp	Asp	Leu	Pro	Asp	Ser	Ala	Ser	Gln	Ala	Ala	His	Pro
	435					440					445			
Asp	Ser	Ala	Phe	Ser	Tyr	Arg	Asp	Ala	Lys	Lys	Lys	Leu	Arg	Leu
	450				455					460				
Leu	Cys	Ser	Ala	Asp	Ser	Val	Ala	Phe	Pro	Val	Leu	Thr	His	Ser
	465				470				475					480
Arg	Asn	Gly	Leu	Pro	Asp	His	Thr	Asp	Pro	Glu	Asp	Asn	Glu	Ile
			485					490					495	
Cys	Phe	Leu	Lys	Val	Gln	Ile	Ala	Glu	Ala	Ile	Asn	Leu	Gln	Asp
			500					505					510	
Asn	Leu	Met	Ala	Gln	Leu	Gln	Glu	Thr	Met	Arg	Cys	Val	Cys	Arg
	515						520					525		
Asp	Asn	Arg	Thr	Cys	Arg	Lys	Leu	Leu	Ala	Ser	Ile	Ala	Glu	Asp
	530					535				540				
Arg	Lys	Arg	Ala	Pro	Tyr	Ile	Ala	Tyr	Leu	Thr	Arg	Cys	Arg	Gln
	545				550				555					560
Leu	Gln	Thr	Thr	Gln	Ala	His	Leu	Glu	Arg	Leu	Leu	Gln	Arg	Val
				565				570						575
Arg	Asp	Lys	Glu	Val	Ala	Asn	Arg	Tyr	Phe	Thr	Thr	Val	Cys	Val
			580					585				590		
Leu	Leu	Leu	Glu	Ser	Lys	Glu	Lys	Lys	Ile	Arg	Glu	Phe	Ile	Gln
	595					600					605			
Phe	Gln	Lys	Leu	Thr	Ala	Ala	Asp	Asp	Lys	Thr	Ala	Gln	Val	Glu
	610				615					620				
Phe	Leu	Gln	Phe	Leu	Tyr	Gly	Ala	Met	Ala	Gln	Asp	Val	Ile	Trp
	625				630				635					640
Asn	Ala	Ser	Glu	Glu	Gln	Leu	Gln	Asp	Ala	Gln	Leu	Ala	Ile	Glu
			645					650					655	
Ser	Val	Met	Asn	Arg	Ile	Phe	Lys	Leu	Ala	Phe	Tyr	Pro	Asn	Gln

660					665					670					
Gly	Asp	Ile	Leu	Arg	Asp	Gln	Val	Leu	His	Glu	His	Ile	Gln	Arg	Leu
675					680					685					
Ser	Lys	Val	Val	Thr	Ala	Asn	His	Arg	Ala	Leu	Gln	Ile	Pro	Glu	Val
690					695					700					
Tyr	Leu	Arg	Glu	Ala	Pro	Trp	Pro	Ser	Ala	Gln	Ser	Glu	Ile	Arg	Thr
705					710					715					
Ile	Ser	Ala	Tyr	Lys	Thr	Pro	Arg	Asp	Lys	Val	Gln	Cys	Ile	Leu	Arg
725					730					735					
Met	Cys	Ser	Thr	Ile	Met	Asn	Leu	Leu	Ser	Leu	Ala	Asn	Glu	Asp	Ser
740					745					750					
Val	Pro	Gly	Ala	Asp	Asp	Phe	Val	Pro	Val	Leu	Val	Phe	Val	Leu	Ile
755					760					765					
Lys	Ala	Asn	Pro	Pro	Cys	Leu	Leu	Ser	Thr	Val	Gln	Tyr	Ile	Ser	Ser
770					775					780					
Phe	Tyr	Ala	Ser	Cys	Leu	Ser	Gly	Glu	Glu	Ser	Tyr	Trp	Trp	Met	Gln
785					790					795					
Phe	Thr	Ala	Ala	Val	Glu	Phe	Ile	Lys	Thr	Ile	Asp	Asp	Arg	Lys	
805					810					815					

<210> 3729

<211> 819

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(815)

<223> Xaa = any amino acid or nothing

<400> 3729															
Glu	Ile	Ala	Gly	Ala	Ala	Ala	Glu	Asn	Met	Leu	Gly	Ser	Leu	Leu	Cys
1				5					10					15	
Leu	Pro	Gly	Ser	Gly	Ser	Val	Leu	Leu	Asp	Pro	Cys	Thr	Gly	Ser	Thr
			20						25				30		
Ile	Ser	Glu	Thr	Thr	Ser	Glu	Ala	Trp	Ser	Val	Glu	Val	Leu	Pro	Ser
			35					40					45		
Asp	Ser	Glu	Ala	Pro	Asp	Leu	Lys	Gln	Glu	Glu	Arg	Leu	Gln	Glu	Leu
			50				55				60				
Glu	Ser	Cys	Ser	Gly	Leu	Gly	Ser	Thr	Ser	Asp	Asp	Thr	Asp	Val	Arg
			65			70				75				80	
Glu	Val	Ser	Ser	Arg	Pro	Ser	Thr	Pro	Gly	Leu	Ser	Val	Val	Ser	Gly
				85				90						95	
Ile	Ser	Ala	Thr	Ser	Glu	Asp	Ile	Pro	Asn	Lys	Ile	Glu	Asp	Leu	Arg
			100					105					110		
Ser	Glu	Cys	Ser	Ser	Asp	Phe	Gly	Gly	Lys	Asp	Ser	Val	Thr	Ser	Pro
			115				120					125			
Asp	Met	Asp	Glu	Ile	Thr	His	Asp	Phe	Leu	Tyr	Ile	Leu	Gln	Pro	Lys
			130			135					140				
Gln	His	Phe	Gln	His	Ile	Glu	Ala	Glu	Ala	Asp	Met	Arg	Ile	Gln	Leu
			145			150				155				160	
Ser	Ser	Ser	Ala	His	Gln	Leu	Thr	Ser	Pro	Pro	Ser	Gln	Ser	Glu	Ser
				165				170						175	
Leu	Leu	Ala	Met	Phe	Asp	Pro	Leu	Ser	Ser	His	Glu	Gly	Ala	Ser	Ala
			180					185					190		
Val	Val	Arg	Pro	Lys	Val	His	Tyr	Ala	Arg	Pro	Ser	His	Pro	Pro	Pro
			195				200					205			
Asp	Pro	Pro	Ile	Leu	Glu	Gly	Ala	Val	Gly	Gly	Asn	Glu	Ala	Arg	Leu
			210			215					220				
Pro	Asn	Phe	Gly	Ser	Pro	Met	Phe	Xaa	Leu	Pro	Ala	Glu	Met	Glu	Ala
			225			230				235				240	
Phe	Lys	Gln	Arg	His	Ser	Tyr	Thr	Pro	Glu	Arg	Leu	Val	Arg	Ser	Arg

5476

755	760	765
Lys Ala Asn Pro Pro Cys Leu Leu Ser Thr Val Gln Tyr Ile Ser Ser		
770	775	780
Phe Tyr Ala Ser Cys Leu Ser Gly Glu Glu Ser Tyr Trp Trp Met Gln		
785	790	795
Phe Thr Ala Ala Val Glu Phe Ile Lys Thr Ile Asp Asp Arg Lys		
805	810	815

<210> 3730

<211> 819

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(815)

<223> Xaa = any amino acid or nothing

<400> 3730

Glu Ile Ala Gly Ala Ala Ala Glu Asn Met Leu Gly Ser Leu Leu Cys		
1	5	10
Leu Pro Gly Ser Gly Ser Val Leu Leu Asp Pro Cys Thr Gly Ser Thr		
20	25	30
Ile Ser Glu Thr Thr Ser Glu Ala Trp Ser Val Glu Val Leu Pro Ser		
35	40	45
Asp Ser Glu Ala Pro Asp Leu Lys Gln Glu Glu Arg Leu Gln Glu Leu		
50	55	60
Glu Ser Cys Ser Gly Leu Gly Ser Thr Ser Asp Asp Thr Asp Val Arg		
65	70	75
Glu Val Ser Ser Arg Pro Ser Thr Pro Gly Leu Ser Val Val Ser Gly		
85	90	95
Ile Ser Ala Thr Ser Glu Asp Ile Pro Asn Lys Ile Glu Asp Leu Arg		
100	105	110
Ser Glu Cys Ser Ser Asp Phe Gly Gly Lys Asp Ser Val Thr Ser Pro		
115	120	125
Asp Met Asp Glu Ile Thr His Asp Phe Leu Tyr Ile Leu Gln Pro Lys		
130	135	140
Gln His Phe Gln His Ile Glu Ala Glu Ala Asp Met Arg Ile Gln Leu		
145	150	155
Ser Ser Ser Ala His Gln Leu Thr Ser Pro Pro Ser Gln Ser Glu Ser		
165	170	175
Leu Leu Ala Met Phe Asp Pro Leu Ser Ser His Glu Gly Ala Ser Ala		
180	185	190
Val Val Arg Pro Lys Val His Tyr Ala Arg Pro Ser His Pro Pro Pro		
195	200	205
Asp Pro Pro Ile Leu Glu Gly Ala Val Gly Gly Asn Glu Ala Arg Leu		
210	215	220
Pro Asn Phe Gly Ser Pro Met Phe Xaa Leu Pro Ala Glu Met Glu Ala		
225	230	235
Phe Lys Gln Arg His Ser Tyr Thr Pro Glu Arg Leu Val Arg Ser Arg		
245	250	255
Ser Ser Asp Ile Val Ser Ser Val Arg Arg Pro Met Ser Asp Pro Ser		
260	265	270
Trp Asn Arg Arg Pro Gly Asn Glu Glu Arg Glu Leu Pro Pro Ala Ala		
275	280	285
Ala Ile Gly Ala Thr Ser Leu Val Ala Ala Pro His Ser Ser Ser Ser		
290	295	300
Ser Pro Ser Lys Asp Ser Ser Arg Gly Glu Thr Glu Glu Arg Lys Asp		
305	310	315
Ser Asp Asp Glu Lys Ser Asp Arg Asn Arg Pro Trp Trp Arg Lys Arg		
325	330	335
Phe Val Ser Ala Met Pro Lys Ala Pro Ile Pro Phe Arg Lys Lys Glu		

<210> 3731
<211> 437

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(434)

<223> Xaa = any amino acid or nothing

<400> 3731

Val Asn Thr Ala Met His Glu Ala Lys Leu Met Glu Glu Cys Asp Glu
 1 5 10 15
 Leu Val Glu Ile Ile Gln Gln Arg Lys Gln Met Ile Ala Val Lys Ile
 20 25 30
 Lys Glu Thr Lys Val Met Lys Leu Arg Lys Leu Ala Gln Gln Val Ala
 35 40 45
 Asn Cys Arg Gln Cys Leu Glu Arg Ser Thr Val Leu Ile Asn Gln Ala
 50 55 60
 Glu His Ile Leu Lys Glu Asn Asp Gln Ala Arg Phe Leu Gln Ser Ala
 65 70 75 80
 Lys Asn Ile Ala Glu Arg Val Ala Met Ala Thr Ala Ser Ser Gln Val
 85 90 95
 Leu Ile Pro Asp Ile Asn Phe Asn Asp Ala Phe Glu Asn Phe Ala Leu
 100 105 110
 Asp Phe Ser Arg Glu Lys Lys Leu Leu Glu Gly Leu Asp Tyr Leu Thr
 115 120 125
 Ala Pro Asn Pro Pro Ser Ile Arg Glu Glu Leu Cys Thr Ala Ser His
 130 135 140
 Asp Thr Ile Thr Val His Trp Ile Ser Asp Asp Glu Phe Ser Ile Ser
 145 150 155 160
 Ser Tyr Glu Leu Gln Tyr Thr Ile Phe Thr Gly Gln Ala Asn Phe Ile
 165 170 175
 Ser Leu Tyr Asn Ser Val Asp Ser Trp Met Ile Val Pro Asn Ile Lys
 180 185 190
 Gln Asn His Tyr Thr Val His Gly Leu Gln Ser Gly Thr Arg Tyr Ile
 195 200 205
 Phe Ile Val Lys Ala Ile Asn Gln Ala Gly Ser Arg Asn Ser Glu Pro
 210 215 220
 Thr Arg Leu Lys Thr Asn Ser Gln Pro Phe Lys Leu Asp Pro Lys Met
 225 230 235 240
 Thr His Lys Lys Leu Lys Ile Ser Asn Asp Gly Leu Gln Met Glu Lys
 245 250 255
 Asp Glu Ser Ser Leu Lys Lys Ser His Thr Pro Glu Arg Phe Ser Gly
 260 265 270
 Thr Gly Cys Tyr Val Tyr Gly Val Leu His Asn Ser Asp Asn Ser Xaa
 275 280 285
 Met Phe Ile Ser Leu Ser Phe Pro Leu Ser His Arg Tyr Ala Ile Gly
 290 295 300
 Ile Ala Tyr Lys Ser Ala Pro Lys Asn Glu Trp Ile Gly Lys Asn Ala
 305 310 315 320
 Ser Ser Trp Val Phe Ser Arg Cys Asn Ser Asn Phe Val Val Arg His
 325 330 335
 Asn Asn Lys Glu Met Leu Val Asp Val Pro Pro His Leu Lys Arg Leu
 340 345 350
 Gly Val Leu Leu Asp Tyr Asp Asn Tyr Asn Met Leu Ser Phe Tyr Asp
 355 360 365
 Pro Ala Asn Ser Leu His Leu His Thr Phe Asp Val Thr Phe Ile Leu
 370 375 380
 Pro Val Cys Pro Thr Phe Thr Ile Trp Asn Lys Ser Leu Met Ile Leu
 385 390 395 400
 Ser Gly Leu Pro Ala Pro Asp Phe Ile Asp Tyr Pro Glu Arg Gln Glu
 405 410 415
 Cys Asn Cys Arg Pro Gln Glu Ser Pro Tyr Val Ser Gly Met Lys Thr
 420 425 430
 Cys His

434

<210> 3732
 <211> 906
 <212> PRT
 <213> Homo sapiens

 <221> misc_feature
 <222> (1)...(901)
 <223> Xaa = any amino acid or nothing

<400> 3732
 Leu Gly Gln Arg Leu Ser Leu Val Pro Arg Pro Ser Leu Lys Arg Arg
 1 5 10 15
 Leu Gly Lys Arg Leu Ser Leu Gly Leu Arg Glu Arg Met Met Ser Leu
 20 25 30
 Trp Trp Ser Gly Pro Lys Val Arg Thr Gln Ala Thr Thr Gly Ala Arg
 35 40 45
 Pro Lys Thr Glu Thr Lys Ser Val Pro Ala Ala Arg Pro Lys Thr Glu
 50 55 60
 Ala Gln Ala Met Ser Gly Ala Arg Pro Lys Thr Glu Val Gln Val Met
 65 70 75 80
 Gly Gly Ala Arg Pro Lys Thr Glu Ala Gln Gly Ile Thr Gly Ala Arg
 85 90 95
 Pro Lys Thr Asp Ala Arg Ala Val Gly Gly Ala Arg Ser Lys Thr Asp
 100 105 110
 Ala Lys Ala Ile Pro Gly Ala Arg Pro Lys Asp Glu Ala Gln Ala Trp
 115 120 125
 Ala Gln Ser Glu Phe Gly Thr Glu Ala Val Ser Gln Ala Glu Gly Val
 130 135 140
 Ser Gln Thr Asn Ala Val Ala Trp Pro Leu Ala Thr Ala Glu Ser Gly
 145 150 155 160
 Ser Val Thr Lys Ser Lys Ala Cys Leu Trp Ile Glu Asn Xaa Ser Met
 165 170 175
 Trp Met Pro Glu Thr Phe Pro Gly Thr Gln Gly Gln Lys Gly Ile Gln
 180 185 190
 Pro Trp Phe Gly Pro Gly Glu Glu Thr Asn Met Gly Ser Trp Cys Tyr
 195 200 205
 Ser Arg Pro Arg Ala Arg Glu Glu Ala Ser Asn Glu Ser Gly Phe Trp
 210 215 220
 Ser Ala Asp Glu Thr Ser Thr Ala Ser Ser Phe Trp Thr Gly Glu Glu
 225 230 235 240
 Thr Ser Val Arg Ser Trp Pro Arg Glu Glu Ser Asn Thr Arg Ser Arg
 245 250 255
 His Arg Ala Lys His Gln Thr Asn Pro Arg Ser Arg Pro Arg Ser Lys
 260 265 270
 Gln Glu Ala Tyr Val Asp Ser Trp Ser Gly Ser Glu Asp Glu Ala Ser
 275 280 285
 Asn Pro Phe Ser Phe Trp Val Gly Glu Asn Thr Asn Asn Leu Phe Arg
 290 295 300
 Pro Arg Val Arg Glu Glu Ala Asn Ile Arg Ser Lys Leu Arg Thr Asn
 305 310 315 320
 Arg Glu Asp Cys Phe Glu Ser Glu Ser Glu Asp Glu Phe Tyr Lys Gln
 325 330 335
 Ser Trp Val Leu Pro Gly Glu Glu Ala Asn Ile Asp Ser Gly Thr Glu
 340 345 350
 Thr Lys Lys Ile Leu Ile Leu Pro Trp Lys Leu Arg Ala Gln Lys Asp
 355 360 365
 Val Asp Ser Asp Arg Val Lys Gln Glu Pro Arg Phe Glu Glu Glu Val
 370 375 380
 Ile Ile Gly Ser Trp Phe Trp Ala Glu Lys Glu Ala Ser Leu Glu Gly

385		390		395		400
Gly Ala Ser Ala Ile Cys Glu Ser Glu Pro Gly Thr Glu Glu Gly Ala						
	405			410		415
Ile Gly Gly Ser Ala Tyr Trp Ala Glu Glu Lys Ser Ser Leu Gly Ala						
	420			425		430
Val Ala Arg Glu Glu Ala Lys Pro Glu Ser Glu Glu Glu Ala Ile Phe						
	435			440		445
Gly Ser Trp Phe Trp Asp Arg Asp Glu Ala Cys Phe Asp Leu Asn Pro						
	450			455		460
Cys Pro Val Tyr Lys Val Ser Asp Arg Phe Arg Asp Ala Ala Glu Glu						
	465			470		480
Leu Asn Ala Ser Ser Arg Pro Gln Thr Trp Asp Glu Val Thr Val Glu						
		485		490		495
Phe Lys Pro Gly Leu Phe His Gly Val Gly Phe Arg Ser Thr Ser Pro						
	500			505		510
Phe Gly Ile Pro Glu Glu Ala Ser Glu Met Leu Glu Ala Lys Pro Lys						
	515			520		525
Asn Leu Glu Leu Ser Pro Glu Gly Glu Glu Gln Glu Ser Leu Leu Gln						
	530			535		540
Pro Asp Gln Pro Ser Pro Glu Phe Thr Phe Gln Tyr Asp Pro Ser Tyr						
	545			550		555
Arg Ser Val Arg Glu Ile Arg Glu His Leu Arg Ala Arg Glu Ser Ala						
		565		570		575
Glu Ser Glu Ser Trp Ser Cys Ser Cys Ile Gln Cys Glu Leu Lys Ile						
	580			585		590
Gly Ser Glu Glu Phe Glu Glu Phe Leu Leu Leu Met Asp Lys Ile Arg						
	595			600		605
Asp Pro Phe Ile His Glu Ile Ser Lys Ile Ala Met Gly Met Arg Ser						
	610			615		620
Ala Ser Gln Phe Thr Arg Asp Phe Ile Arg Asp Ser Gly Val Val Ser						
	625			630		635
Leu Ile Glu Thr Leu Leu Asn Tyr Pro Ser Ser Arg Val Arg Thr Ser						
		645		650		655
Phe Leu Glu Asn Met Ile His Met Ala Pro Pro Tyr Pro Asn Leu Asn						
	660			665		670
Met Ile Glu Thr Phe Ile Cys Gln Val Cys Glu Glu Thr Leu Ala His						
	675			680		685
Ser Val Asp Ser Leu Glu Gln Leu Thr Gly Asn Lys Gly Cys Phe Arg						
	690			695		700
His Leu Thr Met Thr Ile Asp Tyr His Thr Leu Ile Ala Asn Xaa Tyr						
	705			710		715
Gly Pro Gly Phe Pro Leu Leu Phe Xaa Pro Gln Ala Gln Cys Gly Glu						
		725		730		735
Thr Lys Phe His Val Leu Lys Met Leu Leu Asn Leu Ser Glu Asn Pro						
	740			745		750
Ala Val Ala Lys Lys Leu Phe Ser Ala Lys Ala Leu Ser Ile Phe Val						
	755			760		765
Gly Leu Phe Asn Ile Glu Glu Thr Asn Asp Asn Ile Gln Ile Val Ile						
	770			775		780
Lys Met Phe Gln Asn Ile Ser Asn Ile Ile Lys Ser Gly Lys Met Ser						
	785			790		795
Leu Ile Asp Asp Asp Phe Ser Leu Glu Pro Leu Ile Ser Ala Phe Arg						
		805		810		815
Glu Phe Glu Glu Leu Ala Lys Gln Leu Gln Ala Gln Ile Asp Asn Gln						
	820			825		830
Asn Asp Pro Glu Ala Thr Gly Thr Thr Ala Phe Val Gly Lys Gly Asn						
	835			840		845
Asn Pro Ser Ala Asn Arg Glu Arg Leu Ser Pro Ser Val Phe Cys Pro						
	850			855		860
Gly Ala Gln Glu Ala Glu Ser Leu Pro Ala Arg Arg Val Arg Gly Glu						
	865			870		875
Glu Gln Arg Leu Leu Glu Glu Val Gly Ala Arg Thr Ala Asp Gly						
		885		890		895
Ile Pro Glu Gly Trp						

<210> 3733
 <211> 1091
 <212> PRT
 <213> Homo sapiens

<221> misc_feature
 <222> (1)...(1090)
 <223> Xaa = any amino acid or nothing

<400> 3733
 Asp Val Pro Leu Ile Arg Ile Glu Glu Asp Thr Gly Glu Ile Phe Thr
 1 5 10 15
 Thr Gly Ala Arg Ile Asp Arg Glu Lys Leu Cys Ala Gly Ile Pro Arg
 20 25 30
 Asp Glu His Cys Phe Tyr Glu Val Glu Val Ala Ile Leu Pro Asp Glu
 35 40 45
 Ile Phe Arg Leu Val Lys Ile Arg Phe Leu Ile Glu Asp Ile Asn Asp
 50 55 60
 Asn Ala Pro Leu Phe Pro Ala Thr Val Ile Asn Ile Ser Ile Pro Glu
 65 70 75 80
 Asn Ser Ala Ile Asn Ser Lys Tyr Thr Leu Pro Ala Ala Val Asp Pro
 85 90 95
 Asp Val Gly Ile Asn Gly Val Gln Asn Tyr Glu Leu Ile Lys Ser Gln
 100 105 110
 Asn Ile Phe Gly Leu Asp Val Ile Glu Thr Pro Gly Gly Asp Lys Met
 115 120 125
 Pro Gln Leu Ile Val Gln Lys Glu Leu Asp Arg Glu Glu Lys Asp Thr
 130 135 140
 Tyr Val Met Lys Val Lys Val Glu Asp Gly Gly Phe Pro Gln Arg Ser
 145 150 155 160
 Ser Thr Ala Ile Leu Gln Val Ser Val Thr Asp Thr Asn Asp Asn His
 165 170 175
 Pro Val Phe Lys Glu Thr Glu Ile Glu Val Ser Ile Pro Glu Asn Ala
 180 185 190
 Pro Val Gly Thr Ser Val Thr Gln Leu His Ala Thr Asp Ala Asp Ile
 195 200 205
 Gly Glu Asn Ala Lys Ile His Phe Ser Phe Ser Asn Leu Val Ser Asn
 210 215 220
 Ile Ala Arg Arg Leu Phe His Leu Asn Ala Thr Thr Gly Leu Ile Thr
 225 230 235 240
 Ile Lys Glu Pro Leu Asp Arg Glu Glu Thr Pro Asn His Lys Leu Leu
 245 250 255
 Val Leu Ala Ser Asp Gly Gly Leu Met Pro Ala Arg Ala Met Val Leu
 260 265 270
 Val Asn Val Thr Asp Val Asn Asp Asn Val Pro Ser Ile Asp Ile Arg
 275 280 285
 Tyr Ile Val Asn Pro Val Asn Asp Thr Val Val Leu Ser Glu Asn Ile
 290 295 300
 Pro Leu Asn Thr Lys Ile Ala Leu Ile Thr Val Thr Asp Lys Asp Ala
 305 310 315 320
 Asp His Asn Gly Arg Val Thr Cys Phe Thr Asp His Glu Ile Pro Phe
 325 330 335
 Arg Leu Arg Pro Val Phe Ser Asn Gln Phe Leu Leu Glu Thr Ala Ala
 340 345 350
 Tyr Leu Asp Tyr Glu Ser Thr Lys Glu Tyr Ala Ile Lys Leu Leu Ala
 355 360 365
 Ala Asp Ala Gly Lys Pro Pro Leu Asn Gln Ser Ala Met Leu Phe Ile
 370 375 380
 Lys Val Lys Asp Glu Asn Asp Asn Ala Pro Val Phe Thr Gln Ser Phe

385					390					395				400
Val	Thr	Val	Ser	Ile	Pro	Glu	Asn	Asn	Ser	Pro	Gly	Ile	Gln	Leu
				405						410				415
Lys	Val	Ser	Ala	Met	Asp	Ala	Asp	Ser	Gly	Pro	Asn	Ala	Lys	Ile
			420						425					430
Tyr	Leu	Leu	Gly	Pro	Asp	Ala	Pro	Pro	Glu	Phe	Ser	Leu	Asp	Cys
		435						440					445	
Thr	Gly	Met	Leu	Thr	Val	Val	Lys	Lys	Leu	Asp	Arg	Glu	Lys	Glu
	450					455					460			
Lys	Tyr	Leu	Phe	Thr	Ile	Leu	Ala	Lys	Asp	Asn	Gly	Val	Pro	Pro
465					470					475				480
Thr	Ser	Asn	Val	Thr	Val	Phe	Val	Ser	Ile	Ile	Asp	Gln	Asn	Asp
			485						490					495
Ser	Pro	Val	Phe	Thr	His	Asn	Glu	Tyr	Asn	Phe	Tyr	Val	Pro	Glu
		500						505					510	Asn
Leu	Pro	Arg	His	Gly	Thr	Val	Gly	Leu	Ile	Thr	Val	Thr	Asp	Pro
	515						520					525		Asp
Tyr	Gly	Asp	Asn	Ser	Ala	Val	Thr	Leu	Ser	Ile	Leu	Asp	Glu	Asn
	530					535					540			Asp
Asp	Phe	Thr	Ile	Asp	Ser	Gln	Thr	Gly	Val	Ile	Arg	Pro	Asn	Ile
545					550					555				560
Phe	Asp	Arg	Glu	Lys	Gln	Glu	Ser	Tyr	Thr	Phe	Tyr	Val	Lys	Ala
			565						570					575
Asp	Gly	Gly	Arg	Val	Ser	Arg	Ser	Ser	Ser	Ala	Lys	Val	Thr	Ile
			580					585					590	Asn
Val	Val	Asp	Val	Asn	Asp	Asn	Lys	Pro	Val	Phe	Ile	Val	Pro	Pro
	595					600						605		Ser
Asn	Cys	Ser	Tyr	Glu	Leu	Val	Leu	Pro	Ser	Thr	Asn	Pro	Gly	Thr
	610					615						620		Val
Val	Phe	Gln	Val	Ile	Ala	Val	Asp	Asn	Asp	Thr	Gly	Met	Asn	Ala
625					630					635				640
Val	Arg	Tyr	Ser	Ile	Val	Gly	Gly	Asn	Thr	Arg	Asp	Leu	Phe	Ala
			645						650					655
Asp	Gln	Glu	Thr	Gly	Asn	Ile	Thr	Leu	Met	Glu	Lys	Cys	Asp	Val
		660						665					670	Thr
Asp	Leu	Gly	Leu	His	Arg	Val	Leu	Val	Lys	Ala	Asn	Asp	Leu	Gly
	675					680						685		Gln
Pro	Asp	Ser	Leu	Phe	Ser	Val	Val	Ile	Val	Asn	Leu	Phe	Val	Asn
	690					695						700		Glu
Ser	Val	Thr	Asn	Ala	Thr	Leu	Ile	Asn	Glu	Leu	Val	Pro	Gln	Lys
705					710					715				720
Leu	Lys	His	Gln	Xaa	Pro	Gln	Ile	Leu	Glu	Ile	Ala	Asp	Val	Ser
			725						730					735
Pro	Thr	Ser	Asp	Tyr	Val	Lys	Ile	Leu	Val	Ala	Ala	Val	Ala	Gly
		740						745					750	Thr
Ile	Thr	Val	Val	Val	Val	Ile	Phe	Ile	Thr	Ala	Val	Val	Arg	Cys
	755					760						765		Arg
Gln	Ala	Pro	His	Leu	Lys	Ala	Ala	Gln	Lys	Asn	Met	Gln	Asn	Ser
	770					775						780		Glu
Trp	Ala	Thr	Pro	Asn	Pro	Glu	Asn	Arg	Gln	Met	Ile	Met	Met	Lys
785					790					795				800
Lys	Lys	Lys	Lys	Lys	Lys	His	Ser	Pro	Lys	Asn	Leu	Leu	Leu	Asn
			805						810					815
Val	Thr	Ile	Glu	Thr	Lys	Ala	Asp	Asp	Val	Asp	Ser	Asp	Gly	Asn
			820					825					830	
Arg	Val	Thr	Leu	Asp	Leu	Pro	Ile	Asp	Leu	Glu	Glu	Gln	Thr	Met
	835					840						845		Gly
Lys	Tyr	Asn	Trp	Val	Thr	Thr	Pro	Thr	Thr	Phe	Lys	Pro	Asp	Ser
	850					855					860			Pro
Asp	Leu	Ala	Arg	His	Tyr	Lys	Ser	Ala	Ser	Pro	Gln	Pro	Ala	Phe
865					870					875				880
Ile	Gln	Pro	Glu	Thr	Pro	Leu	Asn	Leu	Lys	His	His	Ile	Ile	Gln
				885					890					895
Leu	Pro	Leu	Asp	Asn	Thr	Phe	Val	Ala	Cys	Asp	Ser	Ile	Ser	Asn
														Cys

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          900          905          910
Ser Ser Ser Ser Ser Asp Pro Tyr Ser Val Ser Asp Cys Gly Tyr Pro
          915          920          925
Val Thr Thr Phe Glu Val Pro Val Ser Val His Thr Arg Pro Pro Val
          930          935          940
Asp Leu Glu Val Gly Gly Ala Gln Ser Gly Gln Val Ala Ile Leu Thr
945          950          955          960
Ser Ser Leu Met Glu Leu Leu Leu Cys Leu Met Val Ala Ala Phe Leu
          965          970          975
Pro Leu Glu Leu Arg Pro Leu Gly Gln Gln Asn Val Met Ser Trp Glu
          980          985          990
Gln Glu Ala Lys Ile Leu Leu Val Gly Tyr Trp Gly Asp Gly Glu Trp
          995          1000          1005
Cys His Phe His Phe His His Leu Ile Pro Gly Pro Val Asn Pro Gly
1010          1015          1020
Tyr Glu Arg Lys Gln Tyr His Ile Leu Asp Ser Asp Ser Glu Asp Thr
1025          1030          1035          1040
Gln Pro Ser Gly Glu Leu Cys Pro Ile Pro Val Arg Pro Phe Thr Ile
          1045          1050          1055
Leu Ser Ile Gln Leu Leu Gln Asp Asp Gly Glu His Cys Gly Thr Lys
          1060          1065          1070
Gln Gly Phe Gln Pro Ala Val Gln Leu Gly Leu Leu Pro His Lys Thr
          1075          1080          1085
Leu Lys
1090

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<210> 3734

<211> 282

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(280)

<223> Xaa = any amino acid or nothing

<400> 3734

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Gly Thr Arg Pro Gly His Leu Pro Ala Pro Ser Asp Gly Phe Cys Val
1      5      10      15
His Leu Xaa Ser Ile Pro Ser Trp Gly Ser Phe Xaa Gly Glu Ser Leu
20     25     30
Glu Met Gln Leu Ile Thr Ser Leu Gly Leu Gln Glu Phe Asp Ile Ala
35     40     45
Arg Asn Val Leu Glu Leu Ile Tyr Ala Gln Thr Leu Val Trp Ile Gly
50     55     60
Ile Phe Phe Cys Pro Leu Leu Pro Phe Ile Gln Met Ile Met Leu Phe
65     70     75     80
Ile Met Phe Tyr Ser Lys Asn Ile Ser Leu Met Met Asn Phe Gln Pro
85     90     95
Pro Ser Lys Ala Trp Arg Ala Ser Gln Met Met Thr Phe Phe Ile Phe
100    105    110
Leu Leu Phe Phe Pro Ser Phe Thr Gly Val Leu Cys Thr Leu Ala Ile
115    120    125
Thr Ile Trp Arg Leu Lys Pro Ser Ala Asp Cys Gly Pro Phe Arg Gly
130    135    140
Leu Pro Leu Phe Ile His Ser Ile Tyr Ser Trp Ile Asp Thr Leu Ser
145    150    155    160
Thr Arg Pro Gly Tyr Leu Trp Val Val Trp Ile Tyr Arg Asn Leu Ile
165    170    175
Gly Ser Val His Phe Phe Phe Ile Leu Thr Leu Ile Val Leu Ile Ile
180    185    190
Thr Tyr Leu Tyr Trp Gln Ile Thr Glu Gly Arg Lys Ile Met Ile Arg

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195	200	205
Leu Leu His Glu Gln Ile Ile Asn Glu Gly Lys Asp Lys Met Phe Leu		
210	215	220
Ile Glu Lys Leu Ile Lys Leu Gln Asp Met Glu Lys Lys Ala Asn Pro		
225	230	235
Ser Ser Leu Val Leu Glu Arg Arg Glu Val Glu Gln Gln Gly Phe Leu		240
	245	250
His Leu Gly Glu His Asp Gly Ser Leu Asp Leu Arg Ser Arg Arg Ser		255
	260	265
Val Gln Glu Gly Asn Pro Arg Ala		270
275	280	

<210> 3735
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 3735

Val Glu Val Cys Arg Arg Tyr Leu Trp Lys Met Thr Val Asp Ala Ser		
1	5	10
Gln Asn Val Gln Cys Cys Val Ile Phe Ser His Phe Pro Phe Ile Phe		15
	20	25
Asn Asn Leu Ser Lys Ile Lys Leu Leu His Thr Asp Thr Leu Leu Lys		30
	35	40
Ile Glu Ser Lys Lys His Lys Ala Tyr Leu Arg Ser Ala Ala Ile Glu		45
	50	55
Glu Glu Arg Glu Ser Glu Phe Ala Leu Arg Pro Thr Phe Asp Leu Thr		60
	65	70
Val Arg Arg Asn His Leu Ile Glu Asp Val Leu Asn Gln Leu Ser Gln		75
	85	90
Phe Glu Asn Glu Asp Leu Arg Lys Glu Leu Trp Val Ser Phe Ser Gly		95
	100	105
Glu Ile Gly Tyr Asp Leu Gly Gly Ser Val Lys Lys Glu Ile Phe Tyr		110
	115	120
Cys Leu Phe Ala Glu Met Ile Gln Pro Glu Tyr Gly Met Phe Met Tyr		125
	130	135
		140
		144

<210> 3736
 <211> 400
 <212> PRT
 <213> Homo sapiens

<221> misc_feature
 <222> (1)...(399)
 <223> Xaa = any amino acid or nothing

<400> 3736

Lys Gly Ala Pro Ser Phe Val Arg Leu Tyr Gln Tyr Pro Asn Phe Ala		
1	5	10
Gly Pro His Ala Ala Leu Ala Asn Lys Ser Phe Phe Lys Ala Asp Lys		15
	20	25
Val Thr Met Leu Trp Asn Lys Lys Ala Thr Ala Val Leu Val Ile Ala		30
	35	40
Ser Thr Asp Val Asp Lys Thr Gly Ala Ser Tyr Tyr Gly Glu Gln Thr		45
	50	55
Leu His Tyr Ile Ala Thr Asn Gly Glu Ser Ala Val Val Gln Leu Pro		60

65	70	75	80
Lys Asn Gly Pro Ile Tyr Asp Val Val Trp Asn Ser Ser Ser Thr Glu			
	85	90	95
Phe Cys Ala Val Tyr Gly Phe Met Pro Ala Lys Ala Thr Ile Phe Asn			
	100	105	110
Leu Lys Cys Asp Pro Val Phe Asp Phe Gly Thr Gly Pro Arg Asn Ala			
	115	120	125
Ala Tyr Tyr Ser Pro His Gly His Ile Leu Val Leu Ala Gly Phe Gly			
	130	135	140
Asn Leu Ile Leu Gln Ile Xaa Ala Asp Ile Met Lys Val Trp Asn Val			
	145	150	155
Lys Asn Tyr Lys Leu Ile Ser Lys Pro Val Ala Ser Asp Ser Thr Tyr			
	165	170	175
Phe Ala Trp Cys Pro Asp Gly Glu His Ile Leu Thr Ala Thr Cys Ala			
	180	185	190
Pro Arg Leu Arg Val Asn Asn Gly Tyr Lys Ile Trp His Tyr Thr Gly			
	195	200	205
Ser Ile Leu His Lys Tyr Asp Val Pro Ser Asn Ala Glu Leu Trp Gln			
	210	215	220
Val Ser Trp Gln Pro Phe Leu Asp Gly Ile Phe Pro Ala Lys Thr Ile			
	225	230	235
Thr Tyr Gln Ala Val Pro Ser Glu Val Pro Asn Glu Glu Pro Lys Val			
	245	250	255
Ala Thr Ala Tyr Arg Pro Pro Ala Leu Arg Asn Lys Pro Ile Thr Asn			
	260	265	270
Ser Lys Leu His Glu Glu Glu Pro Pro Gln Asn Met Lys Pro Gln Ser			
	275	280	285
Gly Asn Asp Lys Pro Leu Ser Lys Thr Ala Leu Lys Asn Gln Arg Lys			
	290	295	300
His Glu Ala Lys Lys Ala Ala Lys Gln Glu Ala Arg Ser Asp Lys Ser			
	305	310	315
Pro Asp Leu Ala Pro Thr Pro Ala Pro Gln Ser Thr Pro Arg Asn Thr			
	325	330	335
Val Ser Gln Ser Ile Ser Gly Asp Pro Glu Ile Asp Lys Lys Ile Lys			
	340	345	350
Asn Leu Lys Lys Lys Leu Lys Ala Ile Glu Gln Leu Lys Glu Gln Ala			
	355	360	365
Ala Thr Gly Lys Gln Leu Glu Lys Asn Gln Leu Glu Lys Ile Gln Lys			
	370	375	380
Glu Thr Ala Leu Leu Gln Glu Leu Glu Asp Leu Glu Leu Gly Ile			
	385	390	395
			399

<210> 3737

<211> 842

<212> PRT

<213> Homo sapiens

<400> 3737

Val Ala Met Gly Thr Pro Arg Ala Gln His Pro Pro Pro Pro Gln Leu	
1	5
Leu Phe Leu Ile Leu Leu Ser Cys Pro Trp Ile Gln Gly Leu Pro Leu	10
	15
	20
Lys Glu Glu Ile Leu Pro Glu Pro Gly Ser Glu Thr Pro Thr Val	25
	30
	35
Ala Ser Glu Ala Leu Ala Glu Leu Leu His Gly Ala Leu Leu Arg Arg	40
	45
	50
Gly Pro Glu Met Gly Tyr Leu Pro Gly Pro Pro Leu Gly Pro Glu Gly	55
	60
	65
Gly Glu Glu Glu Thr Thr Thr Thr Ile Thr Thr Thr Thr Val Thr	70
	75
	80
	85
Thr Thr Val Thr Ser Pro Val Leu Cys Asn Asn Asn Ile Ser Glu Gly	90
	95

										100											105											110	
Glu	Gly	Tyr	Val	Glu	Ser	Pro	Asp	Leu	Gly	Ser	Pro	Val	Ser	Arg	Thr																		
										115											120											125	
Leu	Gly	Leu	Leu	Asp	Cys	Thr	Tyr	Ser	Ile	His	Val	Tyr	Pro	Gly	Tyr																		
										130											135											140	
Gly	Ile	Glu	Ile	Gln	Val	Gln	Thr	Leu	Asn	Leu	Ser	Gln	Glu	Glu	Glu																		
145											150											155											160
Leu	Leu	Val	Leu	Ala	Gly	Gly	Gly	Ser	Pro	Gly	Leu	Ala	Pro	Arg	Leu																		
										165											170											175	
Leu	Ala	Asn	Ser	Ser	Met	Leu	Gly	Glu	Gly	Gln	Val	Leu	Arg	Ser	Pro																		
										180											185											190	
Thr	Asn	Arg	Leu	Leu	Leu	His	Phe	Gln	Ser	Pro	Arg	Val	Pro	Arg	Gly																		
										195											200											205	
Gly	Gly	Phe	Arg	Ile	His	Tyr	Gln	Ala	Tyr	Leu	Leu	Ser	Cys	Gly	Phe																		
										210											215											220	
Pro	Pro	Arg	Pro	Ala	His	Gly	Asp	Val	Ser	Val	Thr	Asp	Leu	His	Pro																		
225											230											235											240
Gly	Gly	Thr	Ala	Thr	Phe	His	Cys	Asp	Ser	Gly	Tyr	Gln	Leu	Gln	Gly																		
										245											250											255	
Glu	Glu	Thr	Leu	Ile	Cys	Leu	Asn	Gly	Thr	Arg	Pro	Ser	Trp	Asn	Gly																		
										260											265											270	
Glu	Thr	Pro	Ser	Cys	Met	Ala	Ser	Cys	Gly	Gly	Thr	Ile	His	Asn	Ala																		
										275											280											285	
Thr	Leu	Gly	Arg	Ile	Val	Ser	Pro	Glu	Pro	Gly	Gly	Ala	Val	Gly	Pro																		
										290											295											300	
Asn	Leu	Thr	Cys	Arg	Trp	Val	Ile	Glu	Ala	Ala	Glu	Gly	Arg	Arg	Leu																		
305											310											315											320
His	Leu	His	Phe	Glu	Arg	Val	Ser	Leu	Asp	Glu	Asp	Asn	Asp	Arg	Leu																		
										325											330											335	
Met	Val	Arg	Ser	Gly	Gly	Ser	Pro	Leu	Ser	Pro	Val	Ile	Tyr	Asp	Ser																		
										340											345											350	
Asp	Met	Asp	Asp	Val	Pro	Glu	Arg	Gly	Leu	Ile	Ser	Asp	Ala	Gln	Ser																		
										355											360											365	
Leu	Tyr	Val	Glu	Leu	Leu	Ser	Glu	Thr	Pro	Ala	Asn	Pro	Leu	Leu	Leu																		
										370											375											380	
Ser	Leu	Arg	Phe	Glu	Ala	Phe	Glu	Glu	Asp	Arg	Cys	Phe	Ala	Pro	Phe																		
385											390											395											400
Leu	Ala	His	Gly	Asn	Val	Thr	Thr	Thr	Asp	Pro	Glu	Tyr	Arg	Pro	Gly																		
										405											410											415	
Ala	Leu	Ala	Thr	Phe	Ser	Cys	Leu	Pro	Gly	Tyr	Ala	Leu	Glu	Pro	Pro																		
										420											425											430	
Gly	Pro	Pro	Asn	Ala	Ile	Glu	Cys	Val	Asp	Pro	Thr	Glu	Pro	His	Trp																		
										435											440											445	
Asn	Asp	Thr	Glu	Pro	Ala	Cys	Lys	Ala	Met	Cys	Gly	Gly	Glu	Leu	Ser																		
										450											455											460	
Glu	Pro	Ala	Gly	Val	Val	Leu	Ser	Pro	Asp	Trp	Pro	Gln	Ser	Tyr	Ser																		
465											470											475											480
Pro	Gly	Gln	Asp	Cys	Val	Trp	Gly	Val	His	Val	Gln	Glu	Glu	Lys	Arg																		
										485											490											495	
Ile	Leu	Leu	Gln	Val	Glu	Ile	Leu	Asn	Val	Arg	Glu	Gly	Asp	Met	Leu																		
										500											505											510	
Thr	Leu	Phe	Asp	Gly	Asp	Gly	Pro	Ser	Ala	Arg	Val	Leu	Ala	Gln	Leu																		
										515											520											525	
Arg	Gly	Pro	Gln	Pro	Arg	Arg	Arg	Leu	Leu	Ser	Ser	Gly	Pro	Asp	Leu																		
										530											535											540	
Thr	Leu	Gln	Phe	Gln	Ala	Pro	Pro	Gly	Pro	Pro	Asn	Pro	Gly	Leu	Gly																		
545											550											555											560
Gln	Gly	Phe	Val	Leu	His	Phe	Lys	Glu	Val	Pro	Arg	Asn	Asp	Thr	Cys																		
										565											570											575	
Pro	Glu	Leu	Pro	Pro	Pro	Glu	Trp	Gly	Trp	Arg	Thr	Ala	Ser	His	Gly																		
										580											585											590	
Asp	Leu	Ile	Arg	Gly	Thr	Val	Leu	Thr	Tyr	Gln	Cys	Glu	Pro	Gly	Tyr																		
										595											600											605	
Glu	Leu	Leu	Gly	Ser	Asp	Ile	Leu	Thr	Cys	Gln	Trp	Asp	Leu	Ser	Trp																		

610	615	620
Ser Ala Ala Pro Pro Ala Cys Gln Lys Ile Met Thr Cys Ala Asp Pro		
625	630	635
Gly Glu Ile Ala Asn Gly His Arg Thr Ala Ser Asp Ala Gly Phe Pro		640
	645	650
Val Gly Ser His Val Gln Tyr Arg Cys Leu Pro Gly Tyr Ser Leu Glu		655
	660	665
Gly Ala Ala Met Leu Thr Cys Tyr Ser Arg Asp Thr Gly Thr Pro Lys		670
	675	680
Trp Ser Asp Arg Val Pro Lys Cys Ala Leu Lys Tyr Glu Pro Cys Leu		685
	690	695
Asn Pro Gly Val Pro Glu Asn Gly Tyr Gln Thr Leu Tyr Lys His His		700
705	710	715
Tyr Gln Ala Gly Glu Ser Leu Arg Phe Phe Cys Tyr Glu Gly Phe Glu		720
	725	730
Leu Ile Gly Glu Val Thr Ile Thr Cys Val Pro Gly His Pro Ser Gln		735
	740	745
Trp Thr Ser Gln Pro Pro Leu Cys Lys Val Thr Gln Thr Thr Asp Pro		750
	755	760
Ser Arg Gln Leu Glu Gly Gly Asn Leu Ala Leu Ala Ile Leu Leu Pro		765
	770	775
Leu Gly Leu Val Ile Val Leu Gly Ser Gly Val Tyr Ile Tyr Tyr Thr		780
785	790	795
Lys Leu Gln Gly Lys Ser Leu Phe Gly Phe Ser Gly Ser His Ser Tyr		800
	805	810
Ser Pro Ile Thr Val Glu Ser Asp Phe Ser Asn Pro Leu Tyr Glu Ala		815
	820	825
Gly Asp Thr Arg Glu Tyr Glu Val Ser Ile		830
	835	840
		842

<210> 3738

<211> 842

<212> PRT

<213> Homo sapiens

<400> 3738

Val Ala Met Gly Thr Pro Arg Ala Gln His Pro Pro Pro Pro Gln Leu	
1	5
Leu Phe Leu Ile Leu Leu Ser Cys Pro Trp Ile Gln Gly Leu Pro Leu	10
	20
Lys Glu Glu Glu Ile Leu Pro Glu Pro Gly Ser Glu Thr Pro Thr Val	25
	30
Ala Ser Glu Ala Leu Ala Glu Leu Leu His Gly Ala Leu Leu Arg Arg	35
	40
Gly Pro Glu Met Gly Tyr Leu Pro Gly Pro Pro Leu Gly Pro Glu Gly	45
65	50
Gly Glu Glu Glu Thr Thr Thr Thr Ile Ile Thr Thr Thr Thr Val Thr	55
	60
Thr Thr Val Thr Ser Pro Val Leu Cys Asn Asn Asn Ile Ser Glu Gly	65
	70
Glu Gly Tyr Val Glu Ser Pro Asp Leu Gly Ser Pro Val Ser Arg Thr	75
	80
Leu Gly Leu Leu Asp Cys Thr Tyr Ser Ile His Val Tyr Pro Gly Tyr	85
	90
Gly Ile Glu Ile Gln Val Gln Thr Leu Asn Leu Ser Gln Glu Glu Glu	95
145	100
Leu Leu Val Leu Ala Gly Gly Gly Ser Pro Gly Leu Ala Pro Arg Leu	105
	110
Leu Ala Asn Ser Ser Met Leu Gly Glu Gly Gln Val Leu Arg Ser Pro	115
	120
Thr Asn Arg Leu Leu Leu His Phe Gln Ser Pro Arg Val Pro Arg Gly	125
	130
	135
	140
	145
	150
	155
	160
	165
	170
	175
	180
	185
	190

										195					200					205					
Gly	Gly	Phe	Arg	Ile	His	Tyr	Gln	Ala	Tyr	Leu	Leu	Ser	Cys	Gly	Phe										
										210					215					220					
Pro	Pro	Arg	Pro	Ala	His	Gly	Asp	Val	Ser	Val	Thr	Asp	Leu	His	Pro										
										225					230					235					
Gly	Gly	Thr	Ala	Thr	Phe	His	Cys	Asp	Ser	Gly	Tyr	Gln	Leu	Gln	Gly										
										245					250					255					
Glu	Glu	Thr	Leu	Ile	Cys	Leu	Asn	Gly	Thr	Arg	Pro	Ser	Trp	Asn	Gly										
										260					265					270					
Glu	Thr	Pro	Ser	Cys	Met	Ala	Ser	Cys	Gly	Gly	Thr	Ile	His	Asn	Ala										
										275					280					285					
Thr	Leu	Gly	Arg	Ile	Val	Ser	Pro	Glu	Pro	Gly	Gly	Ala	Val	Gly	Pro										
										290					295					300					
Asn	Leu	Thr	Cys	Arg	Trp	Val	Ile	Glu	Ala	Ala	Glu	Gly	Arg	Arg	Leu										
										305					310					315					
His	Leu	His	Phe	Glu	Arg	Val	Ser	Leu	Asp	Glu	Asp	Asn	Asp	Arg	Leu										
										325					330					335					
Met	Val	Arg	Ser	Gly	Gly	Ser	Pro	Leu	Ser	Pro	Val	Ile	Tyr	Asp	Ser										
										340					345					350					
Asp	Met	Asp	Asp	Val	Pro	Glu	Arg	Gly	Leu	Ile	Ser	Asp	Ala	Gln	Ser										
										355					360					365					
Leu	Tyr	Val	Glu	Leu	Leu	Ser	Glu	Thr	Pro	Ala	Asn	Pro	Leu	Leu	Leu										
										370					375					380					
Ser	Leu	Arg	Phe	Glu	Ala	Phe	Glu	Glu	Asp	Arg	Cys	Phe	Ala	Pro	Phe										
										385					390					395					
Leu	Ala	His	Gly	Asn	Val	Thr	Thr	Thr	Asp	Pro	Glu	Tyr	Arg	Pro	Gly										
										405					410					415					
Ala	Leu	Ala	Thr	Phe	Ser	Cys	Leu	Pro	Gly	Tyr	Ala	Leu	Glu	Pro	Pro										
										420					425					430					
Gly	Pro	Pro	Asn	Ala	Ile	Glu	Cys	Val	Asp	Pro	Thr	Glu	Pro	His	Trp										
										435					440					445					
Asn	Asp	Thr	Glu	Pro	Ala	Cys	Lys	Ala	Met	Cys	Gly	Gly	Glu	Leu	Ser										
										450					455					460					
Glu	Pro	Ala	Gly	Val	Val	Leu	Ser	Pro	Asp	Trp	Pro	Gln	Ser	Tyr	Ser										
										465					470					475					
Pro	Gly	Gln	Asp	Cys	Val	Trp	Gly	Val	His	Val	Gln	Glu	Glu	Lys	Arg										
										485					490					495					
Ile	Leu	Leu	Gln	Val	Glu	Ile	Leu	Asn	Val	Arg	Glu	Gly	Asp	Met	Leu										
										500					505					510					
Thr	Leu	Phe	Asp	Gly	Asp	Gly	Pro	Ser	Ala	Arg	Val	Leu	Ala	Gln	Leu										
										515					520					525					
Arg	Gly	Pro	Gln	Pro	Arg	Arg	Arg	Leu	Leu	Ser	Ser	Gly	Pro	Asp	Leu										
										530					535					540					
Thr	Leu	Gln	Phe	Gln	Ala	Pro	Pro	Gly	Pro	Pro	Asn	Pro	Gly	Leu	Gly										
										545					550					555					
Gln	Gly	Phe	Val	Leu	His	Phe	Lys	Glu	Val	Pro	Arg	Asn	Asp	Thr	Cys										
										565					570					575					
Pro	Glu	Leu	Pro	Pro	Glu	Trp	Gly	Trp	Arg	Thr	Ala	Ser	His	Gly											
										580					585					590					
Asp	Leu	Ile	Arg	Gly	Thr	Val	Leu	Thr	Tyr	Gln	Cys	Glu	Pro	Gly	Tyr										
										595					600					605					
Glu	Leu	Leu	Gly	Ser	Asp	Ile	Leu	Thr	Cys	Gln	Trp	Asp	Leu	Ser	Trp										
										610					615					620					
Ser	Ala	Ala	Pro	Pro	Ala	Cys	Gln	Lys	Ile	Met	Thr	Cys	Ala	Asp	Pro										
										625					630					635					
Gly	Glu	Ile	Ala	Asn	Gly	His	Arg	Thr	Ala	Ser	Asp	Ala	Gly	Phe	Pro										
										645					650					655					
Val	Gly	Ser	His	Val	Gln	Tyr	Arg	Cys	Leu	Pro	Gly	Tyr	Ser	Leu	Glu										
										660					665					670					
Gly	Ala	Ala	Met	Leu	Thr	Cys	Tyr	Ser	Arg	Asp	Thr	Gly	Thr	Pro	Lys										
										675					680					685					
Trp	Ser	Asp	Arg	Val	Pro	Lys	Cys	Ala	Leu	Lys	Tyr	Glu	Pro	Cys	Leu										
										690					695					700					
Asn	Pro	Gly	Val	Pro	Glu	Asn	Gly	Tyr	Gln	Thr	Leu	Tyr	Lys	His	His										

```

705              710              715              720
Tyr Gln Ala Gly Glu Ser Leu Arg Phe Phe Cys Tyr Glu Gly Phe Glu
              725              730              735
Leu Ile Gly Glu Val Thr Ile Thr Cys Val Pro Gly His Pro Ser Gln
              740              745              750
Trp Thr Ser Gln Pro Pro Leu Cys Lys Val Thr Gln Thr Thr Asp Pro
              755              760              765
Ser Arg Gln Leu Glu Gly Gly Asn Leu Ala Leu Ala Ile Leu Leu Pro
              770              775              780
Leu Gly Leu Val Ile Val Leu Gly Ser Gly Val Tyr Ile Tyr Tyr Thr
785              790              795              800
Lys Leu Gln Gly Lys Ser Leu Phe Gly Phe Ser Gly Ser His Ser Tyr
              805              810              815
Ser Pro Ile Thr Val Glu Ser Asp Phe Ser Asn Pro Leu Tyr Glu Ala
              820              825              830
Gly Asp Thr Arg Glu Tyr Glu Val Ser Ile
              835              840              842

```

<210> 3739

<211> 97

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(96)

<223> Xaa = any amino acid or nothing

<400> 3739

```

Leu Leu Glu Pro Glu Pro Ala Glu Glu Tyr Thr Glu Gln Ser Glu Val
1          5          10          15
Glu Ser Thr Glu Gly Met Ile Leu Ile Xaa Cys Cys Leu Tyr Phe Ala
20          25          30
Ala Phe Gln Thr Asn Val Ser Asn Ile Tyr Phe Ala Leu Gln Tyr Val
35          40          45
Asn Arg Gln Phe Met Ala Glu Thr Gln Phe Thr Ser Gly Glu Lys Glu
50          55          60
Gln Val Asp Glu Trp Thr Val Glu Thr Val Glu Val Arg Val Leu Cys
65          70          75          80
Ile Ala Lys Leu Leu Ser Leu Ser Ser Val Ser Asn Phe Tyr Leu Tyr
85          90          95 96

```

<210> 3740

<211> 527

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(526)

<223> Xaa = any amino acid or nothing

<400> 3740

```

Met Ala His Tyr Ile Thr Phe Leu Cys Met Val Leu Val Leu Leu Leu
1          5          10          15
Gln Asn Ser Val Leu Ala Glu Asp Gly Glu Val Arg Ser Ser Cys Arg
20          25          30
Thr Ala Pro Thr Asp Leu Val Phe Ile Leu Asp Gly Ser Tyr Ser Val

```


5491

<210> 3741
 <211> 1277
 <212> PRT
 <213> Homo sapiens

<221> misc_feature
 <222> (1)...(1270)
 <223> Xaa = any amino acid or nothing

<400> 3741
 Met Ser Ala Pro Ala Gly Ser Ser His Pro Ala Ala Ser Ala Arg Ile
 1 5 10 15
 Pro Pro Lys Phe Gly Gly Ser Ala Val Ser Gly Ala Ala Ala Pro Ala
 20 25 30
 Gly Pro Gly Ala Gly Pro Ala Pro His Gln Gln Asn Gly Pro Ala Gln
 35 40 45
 Asn Gln Met Gln Val Pro Ser Gly Tyr Gly Leu His His Gln Asn Tyr
 50 55 60
 Ile Ala Pro Ser Gly His Tyr Ser Gln Gly Pro Gly Lys Met Thr Ser
 65 70 75 80
 Leu Pro Leu Asp Thr Gln Cys Gly Asp Tyr Tyr Ser Ala Leu Tyr Thr
 85 90 95
 Val Pro Thr Gln Asn Val Thr Pro Asn Thr Val Asn Gln Gln Pro Gly
 100 105 110
 Ala Gln Gln Leu Tyr Ser Arg Gly Pro Pro Ala Pro His Ile Val Gly
 115 120 125
 Ser Thr Leu Gly Ser Phe Gln Gly Ala Ala Ser Ser Ala Ser His Leu
 130 135 140
 His Thr Ser Ala Ser Gln Pro Tyr Ser Ser Phe Val Asn His Tyr Asn
 145 150 155 160
 Ser Pro Ala Met Tyr Ser Ala Ser Ser Ser Val Ala Ser Gln Gly Phe
 165 170 175
 Pro Ser Thr Cys Gly His Tyr Ala Met Ser Thr Val Ser Asn Ala Ala
 180 185 190
 Tyr Pro Ser Val Ser Tyr Pro Ser Leu Pro Ala Gly Asp Thr Tyr Gly
 195 200 205
 Gln Met Phe Thr Ser Gln Asn Ala Pro Thr Val Arg Pro Val Lys Asp
 210 215 220
 Asn Ser Phe Ser Gly Gln Asn Thr Ala Ile Ser His Pro Ser Pro Leu
 225 230 235 240
 Pro Pro Leu Pro Ser Gln Gln His His Gln Gln Gln Ser Leu Ser Gly
 245 250 255
 Tyr Ser Thr Leu Thr Trp Ser Ser Pro Gly Leu Pro Ser Thr Gln Asp
 260 265 270
 Asn Leu Ile Arg Asn His Thr Gly Ser Leu Ala Val Ala Asn Asn Asn
 275 280 285
 Pro Thr Ile Thr Val Ala Asp Ser Leu Ser Cys Pro Val Met Gln Asn
 290 295 300
 Val Gln Pro Pro Lys Ser Ser Pro Val Val Ser Thr Val Leu Ser Gly
 305 310 315 320
 Ser Ser Gly Ser Ser Ser Thr Arg Thr Pro Pro Thr Ala Asn His Pro
 325 330 335
 Val Glu Pro Val Thr Ser Val Thr Gln Pro Ser Glu Leu Leu Gln Gln
 340 345 350
 Lys Gly Val Gln Tyr Gly Glu Tyr Val Asn Asn Gln Ala Ser Ser Ala
 355 360 365
 Pro Thr Pro Leu Ser Ser Thr Ser Asp Asp Glu Glu Glu Glu Glu Glu
 370 375 380
 Asp Glu Glu Ala Gly Val Asp Ser Ser Ser Thr Thr Ser Ser Ala Ser
 385 390 395 400
 Pro Met Pro Asn Ser Tyr Asp Ala Leu Glu Gly Gly Ser Tyr Pro Asp
 405 410 415
 Met Leu Ser Ser Ser Ala Ser Ser Pro Ala Pro Asp Pro Ala Pro Glu

5493

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      930      935      940
Val Arg Ser Thr Asp Leu Leu Ser Leu Ala Asn Ile Asn Pro Asp Ala
945      950      955      960
Gly Phe Ala Val Gln Leu Ser Ile Glu Glu Ser Leu Thr Asp Thr Ser
      965      970      975
Leu Val Cys Phe Gln Thr Ala Leu Leu Tyr Thr Ser Ser Lys Gly Glu
      980      985      990
Arg Arg Ile Arg Val His Thr Leu Cys Leu Pro Val Val Ser Ser Leu
      995      1000      1005
Ser Asp Val Tyr Ala Gly Val Asp Val Gln Ala Ala Ile Cys Leu Leu
      1010      1015      1020
Ala Asn Met Ala Val Asp Arg Ser Val Ser Ser Ser Leu Ser Asp Ala
1025      1030      1035      1040
Arg Asp Ala Leu Val Asn Ala Val Val Asp Ser Leu Ser Ala Tyr Gly
      1045      1050      1055
Ser Thr Val Ser Asn Leu Gln His Ser Ala Leu Met Ala Pro Ser Ser
      1060      1065      1070
Leu Lys Leu Phe Pro Leu Tyr Val Leu Ala Leu Leu Lys Gln Lys Ala
      1075      1080      1085
Phe Arg Thr Gly Thr Ser Thr Arg Leu Asp Asp Arg Val Tyr Ala Met
      1090      1095      1100
Cys Gln Ile Lys Ser Gln Pro Leu Val His Leu Met Lys Met Ile His
1105      1110      1115      1120
Pro Asn Leu Tyr Arg Ile Asp Arg Leu Thr Asp Glu Gly Ala Val His
      1125      1130      1135
Val Asn Asp Arg Ile Val Pro Gln Pro Pro Leu Gln Lys Leu Ser Ala
      1140      1145      1150
Glu Lys Leu Thr Arg Glu Gly Ala Phe Leu Met Asp Cys Gly Ser Val
      1155      1160      1165
Phe Tyr Ile Trp Val Gly Lys Gly Cys Asp Asn Asn Phe Ile Glu Asp
      1170      1175      1180
Val Leu Gly Tyr Thr Asn Phe Ala Ser Ile Pro Gln Lys Met Thr His
1185      1190      1195      1200
Leu Pro Glu Leu Asp Thr Leu Ser Ser Glu Arg Ala Arg Ser Phe Ile
      1205      1210      1215
Thr Trp Leu Arg Asp Ser Arg Pro Leu Ser Pro Ile Leu His Ile Val
      1220      1225      1230
Lys Asp Glu Ser Pro Ala Lys Ala Glu Phe Phe Gln His Leu Ile Glu
      1235      1240      1245
Asp Arg Thr Glu Ala Ala Phe Ser Tyr Tyr Glu Phe Leu Leu His Val
      1250      1255      1260
Gln Gln Gln Ile Cys Lys
1265      1270

```

<210> 3742

<211> 292

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(286)

<223> Xaa = any amino acid or nothing

<400> 3742

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Ser Met Leu Ala Ser Gln Gly Val Leu Leu His Pro Tyr Gly Val Pro
1      5      10      15
Met Ile Val Pro Ala Ala Pro Tyr Leu Pro Gly Leu Ile Gln Gly Asn
      20      25      30
Gln Glu Ala Ala Ala Ala Pro Asp Thr Met Ala Gln Pro Tyr Ala Ser
      35      40      45
Ala Gln Phe Ala Pro Pro Gln Asn Gly Ile Pro Ala Glu Tyr Thr Ala

```

```
<210> 3743
<211> 487
<212> PRT
<213> Homo sapiens
```

5495

195 200 205
 Pro Gly Pro Gln Gly His Ile Gly Pro Gln Gly Pro Pro Gly Pro Gln
 210 215 220
 Gly His Leu Gly Pro Gln Gly Pro Pro Gly Thr Gln Gly Met Gln Gly
 225 230 235 240
 Pro Pro Gly Pro Arg Gly Met Gln Gly Pro Pro His Pro His Gly Ile
 245 250 255
 Gln Gly Gly Pro Gly Ser Gln Gly Ile Gln Gly Pro Val Ser Gln Gly
 260 265 270
 Pro Leu Met Gly Leu Asn Pro Lys Gly Met Gln Gly Pro Pro Gly Pro
 275 280 285
 Arg Glu Asn Gln Gly Pro Ala Pro Gln Gly Met Ile Met Gly His Pro
 290 295 300
 Pro Gln Glu Met Arg Gly Pro His Pro Pro Gly Gly Leu Leu Gly His
 305 310 315 320
 Gly Pro Gln Glu Met Arg Gly Pro Gln Glu Ile Arg Gly Met Gln Gly
 325 330 335
 Pro Pro Pro Gln Gly Ser Met Leu Gly Pro Pro Gln Glu Leu Arg Gly
 340 345 350
 Pro Pro Gly Ser Gln Ser Gln Gln Gly Pro Pro Gln Gly Ser Leu Gly
 355 360 365
 Pro Pro Pro Gln Gly Gly Met Gln Gly Pro Pro Gly Pro Gln Gly Gln
 370 375 380
 Gln Asn Pro Ala Arg Gly Pro His Pro Ser Gln Gly Pro Ile Pro Phe
 385 390 395 400
 Gln Gln Gln Lys Thr Pro Leu Leu Gly Asp Gly Pro Arg Ala Pro Phe
 405 410 415
 Asn Gln Glu Gly Gln Ser Thr Gly Pro Pro Pro Leu Ile Pro Gly Leu
 420 425 430
 Gly Gln Gln Gly Ala Gln Gly Arg Ile Pro Pro Leu Asn Pro Gly Gln
 435 440 445
 Gly Pro Gly Pro Asn Lys Val Ser Glu Arg Gly Ala Pro Pro Arg His
 450 455 460
 Glu Gly Arg Ala Pro Pro Arg Gly Arg Asp Gly Phe Pro Gly Pro Met
 465 470 475 480
 Lys Thr Leu Val
 484

<210> 3744

<211> 306

<212> PRT

<213> Homo sapiens

<400> 3744

Pro Leu Thr Gly Arg Lys Cys Pro Gly Trp Thr His Ser Gly Ser Arg
 1 5 10 15
 Arg Ser Pro Arg Ile Ala Glu Glu Val Pro Gly Phe Pro Lys Arg Ala
 20 25 30
 Glu Ala Ser Arg Gln Phe Ser Glu Thr Ala Asp Arg Leu Glu Leu Leu
 35 40 45
 Arg Arg Ala Val Met Ala Ala Ala Arg Ala Thr Thr Pro Ala Asp Gly
 50 55 60
 Glu Glu Pro Ala Pro Glu Ala Glu Ala Leu Ala Ala Arg Glu Arg
 65 70 75 80
 Ser Ser Arg Phe Leu Ser Gly Leu Glu Leu Val Lys Gln Gly Ala Glu
 85 90 95
 Ala Arg Val Phe Arg Gly Arg Phe Gln Gly Arg Ala Ala Val Ile Lys
 100 105 110
 His Arg Phe Pro Lys Gly Tyr Arg His Pro Ala Leu Glu Ala Arg Leu
 115 120 125
 Gly Arg Arg Arg Thr Val Gln Glu Ala Arg Ala Leu Leu Arg Cys Arg

130	135	140
Arg Ala Gly Ile Ser Ala Pro Val Val Phe Phe Val Asp Tyr Ala Ser		
145	150	155
Asn Cys Leu Tyr Met Glu Glu Ile Glu Gly Ser Val Thr Val Arg Asp		160
	165	170
Ile Phe Ser Pro Leu Trp Arg Leu Lys Lys Thr Pro Gln Gly Leu Ser		175
	180	185
Asn Leu Ala Lys Thr Ile Gly Gln Val Leu Ala Arg Met His Asp Glu		190
	195	200
Asp Leu Ile His Gly Asp Leu Thr Thr Ser Asn Met Leu Leu Lys Pro		205
	210	215
Pro Leu Glu Gln Leu Asn Ile Val Leu Ile Asp Phe Gly Leu Ser Phe		220
225	230	235
Ile Ser Ala Leu Pro Glu Asp Lys Gly Val Asp Leu Tyr Val Leu Glu		240
	245	250
Lys Ala Phe Leu Ser Thr His Pro Asn Thr Glu Thr Val Phe Glu Ala		255
	260	265
Phe Leu Lys Ser Tyr Ser Thr Ser Ser Lys Lys Ala Arg Pro Val Leu		270
	275	280
Lys Lys Leu Asp Glu Val Arg Leu Arg Gly Lys Lys Arg Ser Met Val		285
	290	295
Gly		300
305		

<210> 3745

<211> 437

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(435)

<223> Xaa = any amino acid or nothing

<400> 3745

Gly Ser His Arg Phe Ser Leu Ala Ser Pro Leu Asp Pro Glu Val Gly		
1	5	10
Pro Tyr Cys Asp Thr Pro Thr Met Arg Thr Leu Phe Asn Leu Leu Trp		15
	20	25
Leu Ala Leu Ala Cys Ser Pro Val His Thr Thr Leu Ser Lys Ser Asp		30
	35	40
Ala Lys Lys Ala Ala Ser Lys Thr Leu Leu Glu Lys Ser Gln Phe Ser		45
	50	55
Asp Lys Pro Val Gln Asp Arg Gly Leu Val Val Thr Asp Leu Lys Ala		60
	65	70
Glu Ser Val Val Leu Glu His Arg Ser Tyr Cys Ser Ala Lys Ala Arg		75
	85	90
Asp Arg His Phe Ala Gly Asp Val Leu Gly Tyr Val Thr Pro Trp Asn		95
	100	105
Ser His Gly Tyr Asp Val Thr Lys Val Phe Gly Ser Lys Phe Thr Gln		110
	115	120
Ile Ser Pro Val Trp Leu Gln Leu Lys Arg Arg Gly Arg Glu Met Phe		125
	130	135
Glu Val Thr Gly Leu His Asp Val Asp Gln Gly Trp Met Arg Ala Val		140
145	150	155
Arg Lys His Ala Lys Gly Leu Pro Xaa Cys Leu Gly Ser Cys Leu Arg		160
	165	170
Thr Gly Leu Thr Met Ile Ser Gly Tyr Val Leu Asp Ser Glu Asp Glu		175
	180	185
Ile Glu Glu Leu Ser Lys Thr Val Val Gln Val Ala Lys Asn Gln His		190
	195	200
Phe Asp Gly Phe Val Val Glu Val Trp Asn Gln Leu Leu Ser Gln Lys		205

210	215	220
Arg Val Gly Leu Ile His Met Leu Thr His Leu Ala Glu Ala Leu His		
225	230	235
Gln Ala Arg Leu Leu Ala Leu Leu Val Ile Pro Pro Ala Ile Thr Pro		240
	245	250
Gly Thr Asp Gln Leu Gly Met Phe Thr His Lys Glu Phe Glu Gln Leu		255
	260	265
Ala Pro Val Leu Asp Gly Phe Ser Leu Met Thr Tyr Asp Tyr Ser Thr		270
	275	280
Ala His Gln Pro Gly Pro Asn Ala Pro Leu Ser Trp Val Arg Ala Cys		285
	290	295
Val Gln Val Leu Asp Pro Lys Ser Lys Trp Arg Ser Lys Ile Leu Leu		300
305	310	315
Gly Leu Asn Phe Tyr Gly Met Asp Tyr Ala Thr Ser Lys Asp Ala Arg		320
	325	330
Glu Pro Val Val Gly Ala Arg Tyr Ile Gln Thr Leu Lys Asp His Arg		335
	340	345
Pro Arg Met Val Trp Asp Ser Gln Val Ser Glu His Phe Phe Glu Tyr		350
	355	360
Lys Lys Ser Arg Ser Gly Arg His Val Val Phe Tyr Pro Thr Leu Lys		365
	370	375
Ser Leu Gln Val Arg Leu Glu Leu Ala Arg Glu Leu Gly Val Gly Val		380
385	390	395
Ser Ile Trp Glu Leu Gly Gln Gly Leu Asp Tyr Phe Tyr Asp Leu Leu		400
	405	410
Xaa Val Gly Ile Ala Ala Ser Ala Val Asp Val Phe Phe Ser Lys Pro		415
	420	425
Trp Ser Glu		430
435		

<210> 3746

<211> 299

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(299)

<223> Xaa = any amino acid or nothing

<400> 3746

Ile Asp Arg Ala Ala Glu Cys Arg Thr Lys Pro Leu Pro Met Ala Val	
1	5
Ser Ile Arg Gly Asn Ala Asp Ser Ile Val Ala Cys Leu Val Leu Met	10
	15
	20
Val Leu Tyr Leu Ile Lys Lys Arg Leu Val Ala Cys Ala Ala Val Phe	25
	30
	35
Tyr Gly Phe Ala Val His Met Lys Ile Tyr Pro Glu Thr Tyr Ile Leu	40
	45
	50
Pro Ile Thr Leu His Leu Leu Pro Asp Arg Asp Asn Asp Lys Ser Leu	55
	60
	65
Arg Gln Phe Arg Tyr Thr Phe Gln Ala Cys Leu Xaa Glu Leu Leu Lys	70
	75
	80
	85
Arg Leu Cys Asn Arg Thr Ala Leu Met Phe Val Ala Val Ala Gly Leu	90
	95
	100
Thr Phe Phe Ala Leu Ser Phe Gly Phe Tyr Tyr Glu Tyr Gly Trp Glu	105
	110
	115
Phe Leu Glu His Thr Tyr Phe Tyr His Leu Thr Arg Arg Asp Ile Arg	120
	125
	130
His Asn Phe Ser Pro Tyr Phe Tyr Met Leu Tyr Leu Thr Ala Glu Ser	135
	140
	145
Lys Trp Ser Phe Ser Leu Gly Ile Ala Ala Phe Leu Pro Gln Leu Ile	150
	155
	160

				165					170					175	
Leu	Leu	Ser	Ala	Val	Ser	Phe	Ala	Tyr	Tyr	Arg	Asp	Leu	Val	Phe	Cys
			180					185					190		
Trp	Phe	Leu	His	Thr	Ser	Ile	Phe	Val	Thr	Phe	Asn	Lys	Val	Cys	Thr
		195					200					205			
Ser	Gln	Tyr	Phe	Leu	Trp	Tyr	Leu	Cys	Leu	Leu	Pro	Leu	Val	Met	Pro
	210				215						220				
Leu	Val	Arg	Met	Pro	Trp	Lys	Arg	Ala	Val	Val	Leu	Leu	Met	Leu	Trp
225					230					235					240
Phe	Ile	Gly	Gln	Ala	Met	Trp	Leu	Ala	Pro	Ala	Tyr	Val	Leu	Glu	Phe
			245					250						255	
Gln	Gly	Lys	Asn	Thr	Phe	Leu	Phe	Ile	Trp	Leu	Ala	Gly	Leu	Phe	Phe
			260				265						270		
Leu	Leu	Ile	Asn	Cys	Ser	Ile	Leu	Ile	Gln	Ile	Ile	Ser	His	Tyr	Lys
		275					280					285			
Glu	Glu	Pro	Leu	Thr	Glu	Arg	Ile	Lys	Tyr	Asp					
	290					295				299					

<210> 3747
 <211> 777
 <212> PRT
 <213> Homo sapiens

<400> 3747

Met	Val	Ile	Ser	Phe	Gln	Gly	Leu	Val	Thr	Phe	Gly	Asp	Val	Ala	Val
1				5					10					15	
Asp	Phe	Ser	Gln	Glu	Glu	Trp	Glu	Trp	Leu	Asn	Pro	Ile	Gln	Arg	Asn
			20					25					30		
Leu	Tyr	Arg	Lys	Val	Met	Leu	Glu	Asn	Tyr	Arg	Asn	Leu	Ala	Ser	Leu
		35					40					45			
Gly	Leu	Cys	Val	Ser	Lys	Pro	Asp	Val	Ile	Ser	Ser	Leu	Glu	Gln	Gly
	50					55					60				
Lys	Glu	Pro	Trp	Thr	Val	Lys	Arg	Lys	Met	Thr	Arg	Ala	Trp	Cys	Pro
	65				70					75				80	
Asp	Leu	Lys	Ala	Val	Trp	Lys	Ile	Lys	Glu	Leu	Pro	Leu	Lys	Lys	Asp
			85					90					95		
Phe	Cys	Glu	Gly	Lys	Leu	Ser	Gln	Ala	Val	Ile	Thr	Glu	Arg	Leu	Thr
			100				105						110		
Ser	Tyr	Asn	Leu	Glu	Tyr	Ser	Leu	Leu	Gly	Glu	His	Trp	Asp	Tyr	Asp
		115					120					125			
Ala	Leu	Phe	Glu	Thr	Gln	Pro	Gly	Leu	Val	Thr	Ile	Lys	Asn	Leu	Ala
	130				135						140				
Val	Asp	Phe	Arg	Gln	Gln	Leu	His	Pro	Ala	Gln	Lys	Asn	Phe	Cys	Lys
145				150						155				160	
Asn	Gly	Ile	Trp	Glu	Asn	Asn	Ser	Asp	Leu	Gly	Ser	Ala	Gly	His	Cys
			165					170					175		
Val	Ala	Lys	Pro	Asp	Leu	Val	Ser	Leu	Leu	Glu	Gln	Glu	Lys	Glu	Pro
		180						185					190		
Trp	Met	Val	Lys	Arg	Glu	Leu	Thr	Gly	Ser	Leu	Phe	Ser	Gly	Gln	Arg
		195					200						205		
Ser	Val	His	Glu	Thr	Gln	Glu	Leu	Phe	Pro	Lys	Gln	Asp	Ser	Tyr	Ala
	210				215						220				
Glu	Gly	Val	Thr	Asp	Arg	Thr	Ser	Asn	Thr	Lys	Leu	Asp	Cys	Ser	Ser
225					230					235					240
Phe	Arg	Glu	Asn	Trp	Asp	Ser	Asp	Tyr	Val	Phe	Gly	Arg	Lys	Leu	Ala
			245					250						255	
Val	Gly	Gln	Glu	Thr	Gln	Phe	Arg	Gln	Glu	Pro	Ile	Thr	His	Asn	Lys
		260					265						270		
Thr	Leu	Ser	Lys	Glu	Arg	Glu	Arg	Thr	Tyr	Asn	Lys	Ser	Gly	Arg	Trp
		275					280					285			
Phe	Tyr	Leu	Asp	Asp	Ser	Glu	Glu	Lys	Val	His	Asn	Arg	Asp	Ser	Ile

290 295 300
 Lys Asn Phe Gln Lys Ser Ser Val Val Ile Lys Gln Thr Gly Ile Tyr
 305 310 315 320
 Ala Gly Lys Lys Leu Phe Lys Cys Asn Glu Cys Lys Lys Thr Phe Thr
 325 330 335
 Gln Ser Ser Ser Leu Thr Val His Gln Arg Ile His Thr Gly Glu Lys
 340 345 350
 Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ser Asp Gly Ser Ser
 355 360 365
 Phe Ala Arg His Gln Arg Cys His Thr Gly Lys Lys Pro Tyr Glu Cys
 370 375 380
 Ile Glu Cys Gly Lys Ala Phe Ile Gln Asn Thr Ser Leu Ile Arg His
 385 390 395 400
 Trp Arg Tyr Tyr His Thr Gly Glu Lys Pro Phe Asp Cys Ile Asp Cys
 405 410 415
 Gly Lys Ala Phe Ser Asp His Ile Gly Leu Asn Gln His Arg Arg Ile
 420 425 430
 His Thr Gly Glu Lys Pro Tyr Lys Cys Asp Val Cys His Lys Ser Phe
 435 440 445
 Arg Tyr Gly Ser Ser Leu Thr Val His Gln Arg Ile His Thr Gly Glu
 450 455 460
 Lys Pro Tyr Glu Cys Asp Val Cys Arg Lys Ala Phe Ser His His Ala
 465 470 475 480
 Ser Leu Thr Gln His Gln Arg Val His Ser Gly Glu Lys Pro Phe Lys
 485 490 495
 Cys Lys Glu Cys Gly Lys Ala Phe Arg Gln Asn Ile His Leu Ala Ser
 500 505 510
 His Leu Arg Ile His Thr Gly Glu Lys Pro Phe Glu Cys Ala Glu Cys
 515 520 525
 Gly Lys Ser Phe Ser Ile Ser Ser Gln Leu Ala Thr His Gln Arg Ile
 530 535 540
 His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Val Cys Ser Lys Ala Phe
 545 550 555 560
 Thr Gln Lys Ala His Leu Ala Gln His Gln Lys Thr His Thr Gly Glu
 565 570 575
 Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ala Phe Ser Gln Thr Thr
 580 585 590
 His Leu Ile Gln His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Lys
 595 600 605
 Cys Met Glu Cys Gly Lys Ala Phe Gly Asp Asn Ser Ser Cys Thr Gln
 610 615 620
 His Gln Arg Leu His Thr Gly Gln Arg Pro Tyr Glu Cys Ile Glu Cys
 625 630 635 640
 Gly Lys Ala Phe Lys Thr Lys Ser Ser Leu Ile Cys His Arg Arg Ser
 645 650 655
 His Thr Gly Glu Lys Pro Tyr Glu Cys Ser Val Cys Gly Lys Ala Phe
 660 665 670
 Ser His Arg Gln Ser Leu Ser Val His Gln Arg Ile His Ser Gly Lys
 675 680 685
 Lys Pro Tyr Glu Cys Lys Glu Cys Arg Lys Thr Phe Ile Gln Ile Gly
 690 695 700
 His Leu Asn Gln His Lys Arg Val His Thr Gly Glu Arg Ser Tyr Asn
 705 710 715 720
 Tyr Lys Lys Ser Arg Lys Val Phe Arg Gln Thr Ala His Leu Ala His
 725 730 735
 His Gln Arg Ile His Thr Gly Glu Ser Ser Thr Cys Pro Ser Leu Pro
 740 745 750
 Ser Thr Ser Asn Pro Val Asp Leu Phe Pro Lys Phe Leu Trp Asn Pro
 755 760 765
 Ser Ser Leu Pro Ser Pro
 770 774

<210> 3748

<211> 278

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(272)

<223> Xaa = any amino acid or nothing

<400> 3748

```

Gly Gly Tyr Thr Lys Ser Gly Tyr Asp Ser Ala Cys Lys Asp Phe Val
 1           5           10           15
Pro His Asp Leu Glu Val Gln Ile Pro Gly Arg Val Phe Leu Val Thr
      20           25           30
Gly Gly Asn Ser Gly Ile Gly Lys Ala Thr Ala Leu Glu Ile Ala Lys
      35           40           45
Arg Gly Gly Thr Val His Leu Val Cys Arg Asp Gln Ala Pro Ala Glu
      50           55           60
Asp Ala Arg Gly Glu Ile Ile Arg Glu Ser Gly Asn Gln Asn Ile Phe
      65           70           75           80
Leu His Ile Val Asp Leu Ser Asp Pro Lys Lys Ile Trp Lys Phe Val
      85           90           95
Glu Asn Phe Lys Gln Glu His Lys Leu His Val Leu Val Asn Asn Ala
      100          105          110
Gly Cys Met Val Asn Lys Arg Glu Ala His Lys Lys Met Asp Phe Glu
      115          120          125
Lys Asn Phe Gly Cys Gln Tyr Ser Gly Val Cys Thr Phe Leu Thr Thr
      130          135          140
Arg Pro Asp Pro Leu Cys Trp Arg Lys Asn Thr Asp Pro Arg Val Ile
      145          150          155          160
Thr Val Ser Ser Gly Gly Met Leu Val Gln Lys Leu Asn Asn Gln Xaa
      165          170          175
Ser Pro Val Arg Lys Asn Thr Ile Trp Met Gly Thr Met Val Tyr Ala
      180          185          190
Gln Asn Lys Val Ser Glu Arg Gln Gln Val Val Leu Thr Glu Arg Trp
      195          200          205
Gly Pro Arg Ala Pro Gly Ile His Phe Ser Ser Met His Pro Gly Trp
      210          215          220
Ala Asp Thr Pro Gly Val Arg Gln Ala Met Pro Gly Phe His Val Gln
      225          230          235          240
Ala Ser Gly Tyr Arg Leu Arg Ser Glu Ala Gln Gly Ala Asp Thr Met
      245          250          255
Leu Trp Leu Ala Leu Ser Ser Ala Arg Ser Arg Thr Ala Gln Arg Pro
      260          265          270          272

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<210> 3749

<211> 413

<212> PRT

<213> Homo sapiens

<400> 3749

```

Gly Phe Leu Arg Leu Ser Gln Ala Thr Arg Gln Arg Leu Ser Ile Pro
 1           5           10           15
Val Met Val Leu Thr Leu Asp Pro Thr Arg Asp Gln Cys Phe Gly Asp
      20           25           30
Arg Phe Ser Arg Leu Leu Leu Asp Glu Phe Leu Gly Tyr Asp Asp Ile
      35           40           45
Leu Met Ser Ser Val Lys Gly Leu Ala Glu Asn Glu Glu Asn Lys Gly

```

50	55	60																	
Phe	Leu	Arg	Asn	Val	Val	Ser	Gly	Glu	His	Tyr	Arg	Phe	Val	Ser	Met				
65					70					75				80					
Trp	Met	Ala	Arg	Thr	Ser	Tyr	Leu	Ala	Ala	Phe	Ala	Asn	His	Gly	Gln				
			85						90					95					
Ser	Phe	Thr	Leu	Ser	Val	Ser	His	Ala	Cys	Cys	Gly	Tyr	Ser	His	His				
			100					105					110						
Gln	Ile	Phe	Val	Phe	Ile	Val	Asp	Leu	Leu	Gln	Met	Leu	Glu	Met	Asn				
	115						120					125							
Met	Ala	Ile	Ala	Phe	Pro	Ala	Ala	Pro	Leu	Leu	Thr	Val	Ile	Leu	Ala				
	130					135					140								
Leu	Val	Gly	Met	Glu	Ala	Ile	Met	Ser	Glu	Phe	Phe	Asn	Asp	Thr	Thr				
145				150						155				160					
Thr	Ala	Phe	Tyr	Ile	Leu	Ile	Val	Trp	Leu	Ala	Asp	Gln	Tyr	Asp					
			165					170				175							
Ala	Ile	Cys	Cys	His	Thr	Ser	Thr	Ser	Lys	Arg	His	Trp	Leu	Arg	Phe				
	180					185					190								
Phe	Tyr	Leu	Tyr	His	Phe	Ala	Phe	Tyr	Ala	Tyr	His	Tyr	Arg	Phe	Asn				
	195					200					205								
Gly	Gln	Tyr	Ser	Ser	Leu	Ala	Leu	Val	Thr	Ser	Trp	Leu	Phe	Ile	Gln				
	210					215					220								
His	Ser	Met	Ile	Tyr	Phe	His	His	Tyr	Glu	Leu	Pro	Ala	Ile	Leu					
225				230				235					240						
Gln	His	Val	Arg	Ile	Gln	Glu	Met	Leu	Leu	Gln	Ala	Pro	Thr	Leu	Gly				
			245					250					255						
Pro	Gly	Thr	Pro	Thr	Ala	Leu	Pro	Asp	Asp	Met	Asn	Asn	Asn	Ser	Gly				
	260						265					270							
Ala	Pro	Ala	Thr	Ala	Pro	Asp	Ser	Ala	Gly	Gln	Pro	Pro	Ala	Leu	Gly				
	275						280					285							
Pro	Val	Ser	Pro	Gly	Ala	Ser	Gly	Ser	Pro	Gly	Pro	Val	Ala	Ala	Ala				
	290					295				300									
Pro	Ser	Ser	Leu	Val	Ala	Ala	Ala	Ala	Ser	Val	Ala	Ala	Ala	Ala	Gly				
305				310				315					320						
Gly	Asp	Leu	Gly	Trp	Met	Ala	Glu	Thr	Ala	Ala	Ile	Ile	Thr	Asp	Ala				
			325					330					335						
Ser	Phe	Leu	Ser	Gly	Leu	Ser	Ala	Ser	Leu	Leu	Glu	Arg	Arg	Pro	Ala				
	340					345					350								
Ser	Pro	Leu	Gly	Pro	Ala	Gly	Gly	Leu	Pro	His	Ala	Pro	Gln	Asp	Ser				
	355					360					365								
Val	Pro	Pro	Ser	Asp	Ser	Ala	Ala	Ser	Asp	Thr	Thr	Pro	Leu	Gly	Ala				
	370				375					380									
Ala	Val	Gly	Gly	Pro	Ser	Pro	Ala	Ser	Met	Ala	Pro	Thr	Glu	Ala	Pro				
385				390					395						400				
Ser	Glu	Val	Gly	Ser															
				405															

<210> 3750

<211> 284

<212> PRT

<213> Homo sapiens

<400> 3750

Gly	Leu	Leu	Glu	Pro	Phe	Ser	Lys	Leu	Leu	Ser	Phe	Val	Ile	Gln	Asn				
1				5				10					15						
Ala	Val	Phe	Thr	Leu	Ala	Tyr	Leu	Val	Glu	Leu	Cys	Gly	Leu	Cys	Tyr				
			20				25					30							
Arg	Ala	Phe	Thr	Lys	Glu	Arg	Asp	Lys	Phe	Tyr	Leu	Ser	Arg	Ser	Val				
	35					40					45								
Val	Leu	Glu	Leu	Leu	Gln	Ala	Leu	Lys	Leu	Lys	Ser	Pro	Leu	Pro	Asp				
	50				55				60										
Thr	Asn	Leu	Leu	Leu	Leu	Val	Gln	Phe	Ile	Cys	Ala	Asp	Ala	Gly	Thr				

```

65          70          75          80
Lys Leu Ala Glu Ser Thr Ile Leu Ser Lys Gln Met Ile Ala Ser Val
          85          90          95
Pro Gly Cys Gly Thr Ala Ala Met Glu Cys Val Arg Gln Tyr Ile Asn
          100          105          110
Glu Val Leu Asp Phe Met Ala Asp Met His Thr Leu Thr Lys Leu Lys
          115          120          125
Ser His Met Lys Thr Cys Ser Gln Pro Leu His Glu Asp Thr Phe Gly
          130          135          140
Gly His Leu Lys Val Gly Leu Ala Gln Ile Ala Ala Met Asp Ile Ser
          145          150          155
Arg Gly Asn His Arg Asp Asn Lys Ala Val Ile Arg Tyr Leu Pro Trp
          165          170          175
Leu Tyr His Pro Pro Ser Ala Met Gln Gln Gly Pro Lys Glu Phe Ile
          180          185          190
Glu Cys Val Ser His Ile Arg Leu Leu Ser Trp Leu Leu Leu Gly Ser
          195          200          205
Leu Thr His Asn Ala Val Cys Leu Lys Trp Pro Pro Leu Pro Gly Leu
          210          215          220
Pro Ile Pro Leu Asp Ala Gly Ser His Val Ala Asp His Leu Ile Val
          225          230          235
Ile Leu Ile Gly Phe Pro Glu Gln Ser Lys Thr Ser Val Leu His Met
          245          250          255
Cys Ser Leu Phe His Ala Phe Ser Leu Ala Gln Leu Trp Asp Ser Leu
          260          265          270
Leu Ala Arg Gln Ser Gly Arg Trp
          275          280

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<210> 3751

<211> 145

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(142)

<223> Xaa = any amino acid or nothing

<400> 3751

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Ala Phe Thr Arg Lys Cys Glu Glu Thr Ala Phe Ile Val Pro Gln Cys
1          5          10          15
Glu Ile Ile Pro Thr Glu Trp Val Cys Arg Arg Ile Pro Thr Gly Ser
          20          25          30
Ser Leu Glu Arg Asn Pro Gly Val Lys Glu Gly Cys Glu Phe Cys Pro
          35          40          45
Pro Lys Val Glu Met Phe Phe Lys Asp Asp Ala Asn His Asp Pro Gln
          50          55          60
Trp Ser Arg Gln Gln Leu Ile Ala Ala Lys Phe Gly Phe Ala Ala Leu
          65          70          75          80
Gly Ile Gln Thr Glu Val Asp Ile Met Ser His Ala Thr Xaa Ala Val
          85          90          95
Phe Glu Ile Pro Glu Lys Ser Arg Leu Pro Gln Asn Cys Thr Pro Val
          100          105          110
Asp Met Lys Ile Glu Phe Gly Val His Val Thr Ser Lys Glu Ile Leu
          115          120          125
Thr Asp Val Ile Asp Asn Asp Ser Xaa Arg His Ser Pro Ser
          130          135          140          142

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<210> 3752

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3752

Ala Trp Ser Gly Ser Gly Leu Leu Val Leu Cys Ile Asn Thr Ala Ser
 1 5 10 15
 Met Pro Met Ile Ser Val Leu Gly Lys Met Phe Leu Trp Gln Arg Glu
 20 25 30
 Gly Pro Gly Gly Arg Trp Thr Cys Gln Thr Ser Arg Arg Val Ser Ser
 35 40 45
 Asp Pro Ala Trp Ala Val Glu Trp Ile Glu Leu Pro Arg Gly Leu Ser
 50 55 60
 Leu Ser Ser Leu Gly Ser Ala Arg Thr Leu Arg Gly Trp Ser Arg Ser
 65 70 75 80
 Ser Arg Pro Ser Ser Val Asp Ser Gln Asp Leu Pro Glu Val Asn Val
 85 90 95
 Gly Asp Thr Val Ala Met Leu Pro Lys Ser Arg Arg Ala Leu Thr Ile
 100 105 110
 Gln Glu Ile Ala Ala Leu Ala Arg Ser Ser Leu His Gly Ile Ser Gln
 115 120 125
 Val Val Lys Asp His Val Thr Lys Pro Thr Ala Met Ala Gln Gly Arg
 130 135 140
 Val Ala His Leu Ile Glu Trp Lys Gly Trp Ser Lys Pro Ser Asp Ser
 145 150 155 160
 Pro Ala Ala Leu Glu Ser Ala Phe Ser Ser Tyr Ser Asp Leu Ser Glu
 165 170 175
 Gly Glu Gln Glu Ala Arg Phe Ala Ala Gly Val Ala Glu Gln Phe Ala
 180 185 190
 Ile Ala Glu Ala Lys Leu Arg Ala Trp Ser Ser Val Asp Gly Glu Asp
 195 200 205
 Ser Thr Asp Asp Ser Tyr Asp Glu Asp Phe Ala Gly Gly Met Asp Thr
 210 215 220
 Asp Met Ala Gly Gln Leu Pro Leu Gly Pro His Leu Gln Asp Leu Phe
 225 230 235 240
 Thr Gly His Arg Phe Ser Arg Pro Val Arg Gln Gly Ser Val Glu Pro
 245 250 255
 Glu Ser Asp Cys Ser Gln Thr Val Ser Pro Asp Thr Leu Cys Ser Ser
 260 265 270
 Leu Cys Ser Leu Glu Asp Gly Leu Leu Gly Ser Pro Ala Arg Leu Ala
 275 280 285
 Pro Ser Cys Trp Ala Met Ser Cys Phe Ser Pro Asn Cys Pro Pro Ala
 290 295 300
 Gly Lys Val Pro Ser Ala Ala Trp Ala Pro Leu Glu Ala Gln Asp Ser
 305 310 315 320
 Leu Tyr Asn Ser Pro Leu Thr Glu Ser Cys Leu Ser Pro Ala Glu Glu
 325 330 335
 Glu Pro Ala Pro Cys Lys Asp Cys Gln Pro Leu Cys Pro Pro Leu Thr
 340 345 350
 Gly Ser Trp Glu Arg Gln Arg Gln Ala Ser Asp Leu Ala Ser Ser Gly
 355 360 365
 Val Val Ser Leu Asp Glu Asp Glu Ala Glu Pro Glu Glu Gln
 370 375 380 382

<210> 3753

<211> 378

<212> PRT

<213> Homo sapiens

<400> 3753

Tyr Tyr Ser Ser Val Arg Gln Arg Val Thr Cys Glu Glu Pro Arg Phe

```

      1           5           10           15
Arg Glu Cys Ala Ala Ala Leu Ile Glu Gly Ser Ala Thr Glu Val Tyr
      20           25           30
Ala Gly Glu Trp Arg Ala Asp Arg Arg Ser Gly Phe Gly Val Ser Gln
      35           40           45
Arg Ser Asn Gly Leu Arg Tyr Glu Gly Glu Trp Leu Gly Asn Arg Arg
      50           55           60
His Gly Tyr Gly Arg Thr Arg Pro Asp Gly Ser Arg Glu Glu Gly
      65           70           75           80
Lys Tyr Lys Arg Asn Arg Leu Val His Gly Gly Arg Val Arg Ser Leu
      85           90           95
Leu Pro Leu Ala Leu Arg Arg Gly Lys Val Lys Glu Lys Val Asp Arg
      100          105          110
Ala Val Glu Gly Ala Arg Arg Ala Val Ser Ala Ala Arg Gln Arg Gln
      115          120          125
Glu Ile Ala Ala Ala Arg Ala Ala Asp Ala Leu Leu Lys Ala Val Ala
      130          135          140
Ala Ser Ser Val Ala Glu Lys Ala Val Glu Ala Ala Arg Met Ala Lys
      145          150          155          160
Leu Ile Ala Gln Asp Leu Gln Pro Met Leu Glu Ala Pro Gly Arg Arg
      165          170          175
Pro Arg Gln Asp Ser Glu Gly Ser Asp Thr Glu Pro Leu Asp Glu Asp
      180          185          190
Ser Pro Gly Val Tyr Glu Asn Gly Leu Thr Pro Ser Glu Gly Ser Pro
      195          200          205
Glu Leu Pro Ser Ser Pro Ala Ser Ser Arg Gln Pro Trp Arg Pro Pro
      210          215          220
Ala Cys Arg Ser Pro Leu Pro Pro Gly Gly Asp Gln Gly Pro Phe Ser
      225          230          235          240
Ser Pro Lys Ala Trp Pro Glu Glu Trp Gly Gly Ala Gly Ala Gln Ala
      245          250          255
Glu Glu Leu Ala Gly Tyr Glu Ala Glu Asp Glu Ala Gly Met Gln Gly
      260          265          270
Pro Gly Pro Arg Asp Gly Ser Pro Leu Leu Gly Gly Cys Ser Asp Ser
      275          280          285
Ser Gly Ser Leu Arg Glu Glu Gly Glu Asp Glu Glu Pro Leu Pro
      290          295          300
Pro Leu Arg Ala Pro Ala Gly Thr Glu Pro Glu Pro Ile Ala Met Leu
      305          310          315          320
Val Leu Arg Gly Ser Ser Ser Arg Gly Pro Asp Ala Gly Cys Leu Thr
      325          330          335
Glu Glu Leu Gly Glu Pro Ala Ala Thr Glu Arg Pro Ala Gln Pro Gly
      340          345          350
Ala Ala Asn Pro Leu Val Val Gly Ala Val Ala Leu Leu Asp Leu Ser
      355          360          365
Leu Ala Phe Leu Phe Ser Gln Leu Leu Thr
      370          375          378

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<210> 3754

<211> 1112

<212> PRT

<213> Homo sapiens

<400> 3754

```

Ser Ser Leu Leu Glu Lys Met Thr Ser Ser Asp Lys Asp Phe Arg Phe
  1           5           10           15
Met Ala Thr Ser Asp Leu Met Ser Glu Leu Gln Lys Asp Ser Ile Gln
      20           25           30
Leu Asp Glu Asp Ser Glu Arg Lys Val Val Lys Met Leu Leu Arg Leu
      35           40           45
Leu Glu Asp Lys Asn Gly Glu Val Gln Asn Leu Ala Val Lys Trp Leu

```

5506

5507

1075 1080 1085
 Ala Ala Leu Phe Glu Ser Ile Gln Lys Asp Ser Thr Ser Ala Pro Ser
 1090 1095 1100
 Thr Asp Ser Met Glu Leu Ser
 1105 11101111

<210> 3755
 <211> 1112
 <212> PRT
 <213> Homo sapiens

<400> 3755
 Ser Ser Leu Leu Glu Lys Met Thr Ser Ser Asp Lys Asp Phe Arg Phe
 1 5 10 15
 Met Ala Thr Ser Asp Leu Met Ser Glu Leu Gln Lys Asp Ser Ile Gln
 20 25 30
 Leu Asp Glu Asp Ser Glu Arg Lys Val Val Lys Met Leu Leu Arg Leu
 35 40 45
 Leu Glu Asp Lys Asn Gly Glu Val Gln Asn Leu Ala Val Lys Trp Leu
 50 55 60
 Gly Val Pro Leu Gly Ala Phe His Ala Ser Leu Leu His Cys Leu Leu
 65 70 75 80
 Pro Gln Leu Ser Ser Pro Arg Leu Ala Val Arg Lys Arg Ala Val Gly
 85 90 95
 Ala Leu Gly His Leu Ala Thr Ala Cys Ser Thr Asp Leu Phe Val Glu
 100 105 110
 Leu Ala Asp His Leu Leu Asp Arg Leu Pro Gly Pro Arg Val Pro Thr
 115 120 125
 Ser Pro Thr Ala Ile Arg Thr Leu Ile Gln Cys Leu Gly Ser Val Gly
 130 135 140
 Arg Gln Ala Gly His Arg Leu Gly Ala His Leu Asp Arg Leu Val Pro
 145 150 155 160
 Leu Val Glu Asp Phe Cys Asn Leu Asp Asp Asp Glu Leu Arg Glu Ser
 165 170 175
 Cys Leu Gln Ala Phe Glu Ala Phe Leu Arg Lys Cys Pro Lys Glu Met
 180 185 190
 Gly Pro His Val Pro Asn Val Thr Ser Leu Cys Leu Gln Tyr Ile Lys
 195 200 205
 His Asp Pro Asn Tyr Asn Tyr Asp Ser Asp Glu Asp Glu Glu Gln Met
 210 215 220
 Glu Thr Glu Asp Ser Glu Phe Ser Glu Gln Glu Ser Glu Asp Glu Tyr
 225 230 235 240
 Ser Asp Asp Asp Asp Met Ser Trp Lys Val Arg Arg Ala Ala Ala Lys
 245 250 255
 Cys Ile Ala Ala Leu Ile Ser Ser Arg Pro Asp Leu Leu Pro Asp Phe
 260 265 270
 His Cys Thr Leu Ala Pro Val Leu Ile Arg Arg Phe Lys Glu Arg Glu
 275 280 285
 Glu Asn Val Lys Ala Asp Val Phe Thr Ala Tyr Ile Val Leu Leu Arg
 290 295 300
 Gln Thr Arg Pro Pro Lys Gly Trp Leu Glu Ala Met Glu Glu Pro Thr
 305 310 315 320
 Gln Thr Gly Ser Asn Leu His Met Leu Arg Gly Gln Val Pro Leu Val
 325 330 335
 Val Lys Ala Leu Gln Arg Gln Leu Lys Asp Arg Ser Val Arg Ala Arg
 340 345 350
 Gln Gly Cys Phe Ser Leu Leu Thr Glu Leu Ala Gly Val Leu Pro Gly
 355 360 365
 Ser Leu Ala Glu His Met Pro Val Leu Val Ser Gly Ile Ile Phe Ser
 370 375 380
 Leu Ala Asp Arg Ser Ser Ser Thr Ile Arg Met Asp Ala Leu Ala

385				390				395			400			
Phe	Leu	Gln	Gly	Leu	Leu	Gly	Thr	Glu	Pro	Ala	Glu	Ala	Phe	His
				405				410					415	
His	Leu	Pro	Ile	Leu	Leu	Pro	Pro	Val	Met	Ala	Cys	Val	Ala	Asp
			420					425					430	
Phe	Tyr	Lys	Ile	Ala	Ala	Glu	Ala	Leu	Val	Val	Leu	Gln	Glu	Leu
		435					440				445			
Arg	Ala	Leu	Trp	Pro	Leu	His	Arg	Pro	Arg	Met	Leu	Asp	Pro	Glu
	450					455				460				
Tyr	Val	Gly	Glu	Met	Ser	Ala	Val	Thr	Leu	Ala	Arg	Leu	Arg	Ala
465					470				475					480
Asp	Leu	Asp	Gln	Glu	Val	Lys	Glu	Arg	Ala	Ile	Ser	Cys	Met	Gly
			485					490						495
Leu	Val	Gly	His	Leu	Gly	Asp	Arg	Leu	Gly	Asp	Asp	Leu	Glu	Pro
		500						505				510		Thr
Leu	Leu	Leu	Leu	Leu	Asp	Arg	Leu	Arg	Asn	Glu	Ile	Thr	Arg	Leu
	515					520						525		Pro
Ala	Ile	Lys	Ala	Leu	Thr	Leu	Val	Ala	Val	Ser	Pro	Leu	Gln	Leu
	530					535					540			Asp
Leu	Gln	Pro	Ile	Leu	Ala	Glu	Ala	Leu	His	Ile	Leu	Ala	Ser	Phe
545					550					555				Leu
Arg	Lys	Asn	Gln	Arg	Ala	Leu	Arg	Leu	Ala	Thr	Leu	Ala	Ala	Leu
			565					570						Asp
Ala	Leu	Ala	Gln	Ser	Gln	Gly	Leu	Ser	Leu	Pro	Pro	Ser	Ala	Val
		580						585				590		Gln
Ala	Val	Leu	Ala	Glu	Leu	Pro	Ala	Leu	Val	Asn	Glu	Ser	Asp	Met
	595					600					605			His
Val	Ala	Gln	Leu	Ala	Val	Asp	Phe	Leu	Ala	Thr	Val	Thr	Gln	Ala
	610					615					620			Gln
Pro	Ala	Ser	Leu	Val	Glu	Val	Ser	Gly	Pro	Val	Leu	Ser	Glu	Leu
625					630				635					Leu
Arg	Leu	Leu	Arg	Ser	Pro	Leu	Leu	Pro	Ala	Gly	Val	Leu	Ala	Ala
			645					650						Ala
Glu	Gly	Phe	Leu	Gln	Ala	Leu	Val	Gly	Thr	Arg	Pro	Pro	Cys	Val
		660						665				670		Asp
Tyr	Ala	Lys	Leu	Ile	Ser	Leu	Leu	Thr	Ala	Pro	Val	Tyr	Glu	Gln
	675						680					685		Ala
Val	Asp	Gly	Gly	Pro	Gly	Leu	His	Lys	Gln	Val	Phe	His	Ser	Leu
	690					695					700			Ala
Arg	Cys	Val	Ala	Ala	Leu	Ser	Ala	Ala	Cys	Pro	Gln	Glu	Ala	Glu
705					710					715				Ser
Thr	Ala	Ser	Arg	Leu	Val	Cys	Asp	Ala	Arg	Ser	Pro	His	Ser	Ser
			725					730						Thr
Gly	Val	Lys	Val	Leu	Ala	Phe	Leu	Ser	Leu	Ala	Glu	Val	Gly	Gln
		740						745				750		Val
Ala	Gly	Pro	Gly	His	Glu	Arg	Glu	Leu	Lys	Ala	Val	Leu	Leu	Glu
	755						760					765		Ala
Leu	Gly	Ser	Pro	Ser	Glu	Asp	Val	Arg	Ala	Ala	Ala	Ser	Tyr	Ala
	770					775						780		Leu
Gly	Arg	Val	Gly	Ala	Gly	Ser	Leu	Pro	Asp	Phe	Leu	Pro	Phe	Leu
785					790				795					Leu
Glu	Gln	Ile	Glu	Ala	Glu	Pro	Arg	Arg	Gln	Tyr	Leu	Leu	Leu	His
		805						810						Ser
Leu	Lys	Glu	Ala	Leu	Gly	Ala	Ala	Gln	Pro	Asp	Ser	Leu	Lys	Pro
		820						825				830		Tyr
Ala	Glu	Asp	Ile	Trp	Ala	Leu	Leu	Phe	Gln	Arg	Cys	Glu	Gly	Ala
	835						840					845		Glu
Glu	Gly	Thr	Arg	Gly	Val	Val	Ala	Glu	Cys	Ile	Gly	Lys	Leu	Val
	850					855					860			Leu
Val	Asn	Pro	Ser	Phe	Leu	Leu	Pro	Arg	Leu	Arg	Lys	Gln	Leu	Ala
865					870				875					Ala
Gly	Arg	Pro	His	Thr	Arg	Ser	Thr	Val	Ile	Thr	Ala	Val	Lys	Phe
			885					890						Leu
Ile	Ser	Asp	Gln	Pro	His	Pro	Ile	Asp	Pro	Leu	Leu	Lys	Ser	Phe
														Ile

900	905	910
Ala Val His Asn Lys Pro Ser Leu	Val Arg Asp Leu Leu Asp Asp Ile	
915	920	925
Leu Pro Leu Leu Tyr Gln Glu Thr Lys Ile Arg Arg Asp Leu Ile Arg		
930	935	940
Glu Val Glu Met Gly Pro Phe Lys His Thr Val Asp Asp Gly Leu Asp		
945	950	955
Val Arg Lys Ala Ala Phe Glu Cys Met Tyr Ser Leu Leu Glu Ser Cys		
965	970	975
Leu Gly Gln Leu Asp Ile Cys Glu Phe Leu Asn His Val Glu Asp Gly		
980	985	990
Leu Lys Asp His Tyr Asp Ile Arg Met Leu Thr Phe Ile Met Val Ala		
995	1000	1005
Arg Leu Ala Thr Leu Cys Pro Ala Pro Val Leu Gln Arg Val Asp Arg		
1010	1015	1020
Leu Ile Glu Pro Leu Arg Ala Thr Cys Thr Ala Lys Val Lys Ala Gly		
1025	1030	1035
Ser Val Lys Gln Glu Phe Glu Lys Gln Asp Glu Leu Lys Arg Ser Ala		
1045	1050	1055
Met Arg Ala Val Ala Ala Leu Leu Thr Ile Pro Glu Val Gly Lys Ser		
1060	1065	1070
Pro Ile Met Ala Asp Phe Ser Ser Gln Ile Arg Ser Asn Pro Glu Leu		
1075	1080	1085
Ala Ala Leu Phe Glu Ser Ile Gln Lys Asp Ser Thr Ser Ala Pro Ser		
1090	1095	1100
Thr Asp Ser Met Glu Leu Ser		
1105	1110	1111

<210> 3756

<211> 420

<212> PRT

<213> Homo sapiens

<400> 3756

Ser Leu Glu Glu Gln Gln Gly Arg His Pro Ser Phe Ala Pro Lys Cys	
1	5
Ala Ser Gln Ile Leu Gly Arg Ile Met Ile Thr Leu Ile Thr Glu Gln	
20	25
Leu Gln Lys Gln Thr Leu Asp Glu Leu Lys Cys Thr Arg Phe Ser Ile	
35	40
Ser Leu Pro Leu Pro Asp His Ala Asp Ile Ser Asn Cys Gly Asn Ser	
50	55
Phe Gln Leu Val Ser Glu Gly Ala Ser Trp Arg Gly Leu Pro His Cys	
65	70
Ser Cys Ala Glu Phe Gln Asp Gln Pro Gln Leu Gln Leu Pro Ser Leu	
85	90
Arg Pro Glu Pro Ala Pro Gln Thr Thr His Arg Gly Asn Ser Pro Lys	
100	105
Glu Gln Pro Phe Ser Gln Val Leu Arg Pro Glu Pro Pro Asp Pro Glu	
115	120
Lys Leu Pro Val Pro Pro Ala Pro Pro Ser Lys Arg His Cys Arg Ser	
130	135
Leu Ser Val Pro Val Asp Leu Ser Arg Trp Gln Pro Val Trp Arg Pro	
145	150
Ala Pro Ser Lys Leu Trp Thr Pro Ile Lys His Arg Gly Ser Gly Gly	
165	170
Gly Gly Gly Pro Gln Val Pro His Gln Ser Pro Pro Lys Arg Val Ser	
180	185
Ser Leu Ser Val Pro Pro Ser Ser Gln Cys Leu Phe Ser Met Cys Pro	
195	200
Ser Ser His Thr Leu Gln Pro Ser Phe Leu Gln Pro Gly Pro Gly Pro	

210	215	220
Asp Ser Ser Arg Pro Cys Ala Ala Ser Pro Gln Ser Gly Ser Trp Glu		
225	230	235
Ser Asp Ala Glu Ser Leu Ser Pro Cys Pro Pro Gln Arg Arg Phe Ser		240
	245	250
Leu Ser Pro Ser Leu Gly Pro Gln Ala Ser Arg Phe Leu Pro Ser Ala		255
	260	265
Arg Ser Ser Pro Ala Ser Ser Pro Glu Leu Pro Trp Arg Pro Arg Gly		270
	275	280
Leu Arg Asn Leu Pro Arg Ser Arg Ser Gln Pro Cys Asp Leu Asp Ala		285
	290	295
Arg Lys Thr Gly Val Lys Arg Arg His Glu Glu Asp Pro Arg Arg Leu		300
305	310	315
Arg Pro Ser Leu Asp Phe Asp Lys Met Asn Gln Lys Pro Tyr Ser Gly		320
	325	330
Gly Leu Cys Leu Gln Glu Thr Ala Arg Glu Gly Ser Ser Ile Ser Pro		335
	340	345
Pro Trp Phe Met Ala Cys Ser Pro Pro Pro Leu Ser Ala Ser Cys Ser		350
	355	360
Pro Thr Gly Gly Ser Ser Gln Val Leu Ser Glu Ser Glu Glu Glu Glu		365
	370	375
Glu Gly Ala Val Arg Trp Gly Arg Gln Ala Leu Ser Lys Arg Thr Leu		380
385	390	395
Cys Gln Arg Asp Phe Gly Asp Leu Asp Leu Asn Leu Ile Glu Glu Asn		400
	405	410
		415 416

<210> 3757

<211> 141

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(138)

<223> Xaa = any amino acid or nothing

<400> 3757

Pro Lys Pro Met Leu Gln Gln Asp Phe Thr Ser Leu Pro Asp Gln Gly	
1	5
Leu Asp His Ile Ala Glu Asn Ser Tyr Phe Asp Ala Arg Ser Leu Cys	
	20
Ala Ala Glu Leu Val Cys Lys Glu Trp Gln Gln Val Thr Ser Glu Xaa	
	35
Met Leu Trp Lys Lys Leu Ile Glu Arg Met Val His Ala Tyr Pro Leu	
	50
Trp Lys Gly Leu Ser Glu Lys Val Trp Asp Gln His Leu Phe Lys Asn	
	65
Arg Pro Thr Asp Gly Pro Pro Asn Ser Phe His Arg Ser Leu Tyr Pro	
	85
Lys Ile Ile Gln Val Ile Glu Thr Ile Glu Ser Asn Trp Gln Cys Gly	
	100
Xaa His Thr Leu Gln Arg Ile Gln Cys His Ser Glu Lys Ser Lys Gly	
	115
Val Tyr Cys Leu Gln Tyr Asp Asp Glu Lys	
	130
	135
	138

<210> 3758

<211> 204

<212> PRT

<213> Homo sapiens

<400> 3758

```

Phe Val Ser Gly Ser Pro Trp Arg Met Asp Gly Ser Thr Glu Arg Leu
 1             5             10             15
Glu Ala Arg Arg Pro Ala Gly Arg Leu Pro Trp Ser Ser Arg Gln Glu
             20             25             30
Met Thr Arg Arg Pro Ser Leu Met Ala Gly Arg Gln His Gly Trp Ser
             35             40             45
Ala Gln Gln Ser Ala Thr Val Ala Asn Pro Val Pro Gly Ala Asn Pro
             50             55             60
Asp Leu Leu Pro His Phe Leu Gly Glu Pro Glu Asp Val Tyr Ile Val
 65             70             75             80
Lys Asn Lys Pro Val Leu Leu Val Cys Lys Ala Val Pro Ala Thr Gln
             85             90             95
Ile Phe Phe Lys Cys Asn Gly Glu Trp Val Arg Gln Val Asp His Val
             100            105            110
Ile Glu Arg Ser Thr Asp Gly Ser Ser Gly Leu Pro Thr Met Glu Val
             115            120            125
Arg Ile Asn Val Ser Arg Gln Gln Val Glu Lys Val Phe Gly Leu Glu
             130            135            140
Glu Tyr Trp Cys Gln Cys Val Ala Trp Ser Ser Ser Gly Thr Thr Lys
145             150             155             160
Ser Gln Lys Ala Tyr Ile Arg Ile Ala Tyr Leu Arg Lys Asn Phe Glu
             165             170             175
Gln Glu Pro Leu Ala Lys Glu Val Ser Leu Glu Gln Gly Ile Val Leu
             180             185             190
Pro Cys Arg Pro Pro Glu Gly Ile Pro Pro Ala Glu
             195             200             204

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<210> 3759

<211> 187

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(187)

<223> Xaa = any amino acid or nothing

<400> 3759

```

Ala Asp Asp Thr Leu His Leu Trp Asn Leu Arg Gln Lys Arg Pro Ala
 1             5             10             15
Ile Leu His Ser Leu Lys Phe Cys Arg Glu Arg Val Thr Phe Cys His
             20             25             30
Leu Pro Phe Gln Ser Lys Trp Leu Tyr Val Gly Thr Glu Arg Gly Asn
             35             40             45
Ile His Ile Val Asn Val Glu Ser Phe Thr Leu Ser Gly Tyr Val Ile
             50             55             60
Met Trp Asn Lys Ala Ile Glu Leu Ser Ser Lys Ser His Pro Gly Pro
 65             70             75             80
Val Val His Ile Ser Asp Asn Pro Met Asp Glu Gly Lys Leu Leu Ile
             85             90             95
Gly Phe Glu Ser Gly Thr Val Val Leu Trp Asp Leu Lys Ser Lys Lys
             100            105            110
Ala Asp Tyr Arg Tyr Thr Tyr Asp Glu Ala Ile His Ser Val Ala Trp
             115            120            125
His His Glu Gly Lys Gln Phe Ile Cys Ser His Ser Asp Gly Thr Leu
             130            135            140
Thr Ile Trp Asn Val Arg Ser Pro Ala Lys Pro Val Gln Thr Ile Thr

```

145		150		155		160									
Pro	His	Gly	Lys	Gln	Leu	Lys	Asp	Gly	Lys	Lys	Pro	Glu	Pro	Cys	Lys
		165		170		175									
Pro	Ile	Leu	Lys	Val	Glu	Phe	Xaa	Thr	Thr	Arg					
		180		185		187									

<210> 3760

<211> 275

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(274)

<223> Xaa = any amino acid or nothing

<400> 3760

Leu	Pro	Ala	Cys	Arg	Cys	Gly	Cys	Val	Ala	Gly	Cys	Pro	Ser	Asn	His
1				5					10					15	
Gly	Ile	Cys	Arg	Cys	Leu	Arg	Ala	Ser	Glu	Arg	Gln	Val	Cys	Val	Met
		20						25					30		
His	Leu	Lys	His	Leu	Arg	Thr	Leu	Leu	Ser	Pro	Gln	Asp	Gly	Ala	Ala
		35					40					45			
Lys	Val	Thr	Cys	Met	Ala	Trp	Ser	Gln	Asn	Asn	Ala	Lys	Phe	Ala	Val
	50					55					60				
Cys	Thr	Val	Asp	Arg	Val	Val	Leu	Leu	Tyr	Asp	Glu	His	Gly	Glu	Arg
	65				70					75					80
Arg	Asp	Lys	Phe	Ser	Thr	Lys	Pro	Ala	Asp	Met	Lys	Tyr	Gly	Arg	Lys
				85					90					95	
Ser	Tyr	Met	Val	Lys	Gly	Met	Ala	Phe	Ser	Pro	Asp	Ser	Thr	Lys	Ile
		100					105						110		
Ala	Ile	Gly	Gln	Thr	Asp	Asn	Ile	Ile	Tyr	Val	Tyr	Lys	Ile	Gly	Glu
		115					120					125			
Asp	Trp	Gly	Asp	Lys	Lys	Val	Ile	Cys	Asn	Lys	Phe	Ile	Gln	Thr	Val
	130					135					140				
Lys	Phe	Arg	Pro	Val	Pro	Gly	Thr	Leu	Gly	Xaa	Thr	Asn	Ile	Tyr	Gln
	145				150					155					160
Tyr	Ile	Tyr	Leu	Xaa	Ile	Gln	Pro	Gly	Val	Ala	Phe	Leu	Thr	Ser	Glu
				165					170					175	
Cys	Asp	Phe	Ser	Tyr	Cys	Lys	Asp	Gly	Ala	Ser	Trp	Leu	Phe	Met	Val
			180					185					190		
Ile	Cys	Cys	Leu	Pro	Xaa	Ser	Pro	Ala	Val	Ser	Phe	Pro	Ile	Gly	Asp
		195					200					205			
Xaa	Ser	Ala	Val	Thr	Cys	Leu	Gln	Trp	Pro	Ala	Glu	Tyr	Ile	Ile	Val
	210					215					220				
Phe	Gly	Leu	Ala	Glu	Gly	Lys	Val	Arg	Leu	Ser	Asn	Thr	Lys	Thr	Asn
	225					230				235					240
Lys	Ser	Ser	Thr	Ile	Tyr	Gly	Thr	Glu	Ser	Tyr	Val	Val	Ser	Leu	Thr
				245					250					255	
Thr	Asn	Cys	Ser	Gly	Lys	Gly	Ile	Leu	Ser	Gly	His	Ala	Asp	Gly	Tyr
			260					265					270		
Gln	Arg														
	274														

<210> 3761

<211> 651

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1) ... (641)

<223> Xaa = any amino acid or nothing

<400> 3761

```

Pro Val Ile Gln Arg Cys Ser Gln Pro Tyr Gly Phe Ser Leu Leu Ile
 1           5           10           15
Ser Phe Phe Leu Lys Cys Val Ser Glu Thr Ser Gln Gln Pro Pro Ser
      20           25           30
Arg Lys Val Phe Gln Leu Leu Pro Ser Phe Pro Thr Leu Thr Arg Ser
      35           40           45
Lys Ser His Glu Ser Gln Leu Gly Asn Arg Ile Asp Asp Val Ser Ser
      50           55           60
Met Arg Phe Asp Leu Ser His Gly Ser Pro Gln Met Val Arg Arg Asp
      65           70           75           80
Ile Gly Leu Ser Val Thr His Arg Phe Ser Thr Lys Ser Trp Leu Ser
      85           90           95
Gln Val Cys His Val Cys Gln Lys Ser Met Ile Phe Gly Val Lys Cys
      100          105          110
Lys His Cys Arg Leu Lys Cys His Asn Lys Cys Thr Lys Glu Ala Pro
      115          120          125
Ala Cys Arg Ile Ser Phe Leu Pro Leu Thr Arg Leu Arg Arg Thr Glu
      130          135          140
Ser Val Pro Ser Asp Ile Asn Asn Pro Val Asp Arg Ala Ala Glu Pro
      145          150          155          160
His Phe Gly Thr Leu Pro Lys Ala Leu Thr Lys Lys Glu His Pro Pro
      165          170          175
Ala Met Asn His Leu Asp Ser Ser Ser Asn Pro Ser Ser Thr Thr Phe
      180          185          190
Ser Thr Pro Ser Ser Pro Ala Pro Phe Pro Thr Ser Ser Asn Pro Ser
      195          200          205
Ser Ala Thr Thr Pro Pro Asn Pro Ser Pro Gly Gln Arg Asp Ser Arg
      210          215          220
Phe Asn Phe Pro Ser Cys Ala Tyr Phe Ile His His Arg Gln Gln Phe
      225          230          235          240
Ile Phe Pro Asp Ile Ser Ala Phe Ala His Ala Ala Pro Leu Pro Glu
      245          250          255
Ala Ala Asp Gly Thr Arg Leu Asp Asp Gln Pro Lys Ala Asp Val Leu
      260          265          270
Glu Ala His Glu Ala Glu Ala Glu Glu Pro Glu Ala Gly Lys Ser Glu
      275          280          285
Ala Glu Asp Asp Glu Asp Glu Val Asp Asp Leu Pro Ser Ser Arg Arg
      290          295          300
Pro Trp Arg Gly Pro Ile Ser Arg Lys Ala Ser Gln Thr Ser Val Tyr
      305          310          315          320
Leu Gln Glu Trp Asp Ile Pro Phe Glu Gln Val Glu Leu Gly Glu Pro
      325          330          335
Ile Gly Gln Gly Arg Trp Gly Arg Val His Arg Gly Arg Trp His Gly
      340          345          350
Glu Val Ala Ile Arg Leu Leu Glu Met Asp Gly His Asn Gln Asp His
      355          360          365
Leu Lys Leu Phe Lys Lys Glu Val Met Asn Tyr Arg Gln Thr Arg His
      370          375          380
Glu Asn Val Val Leu Phe Met Gly Ala Cys Met Asn Pro Pro His Leu
      385          390          395          400
Ala Ile Ile Thr Ser Phe Cys Lys Gly Arg Thr Leu His Ser Phe Val
      405          410          415
Arg Asp Pro Lys Thr Ser Leu Asp Ile Asn Lys Thr Arg Gln Ile Ala
      420          425          430
Gln Glu Ile Ile Lys Gly Met Gly Tyr Leu His Ala Lys Gly Ile Val
      435          440          445
His Lys Asp Leu Lys Ser Arg Asn Val Phe Tyr Asp Asn Gly Lys Val
      450          455          460
Val Ile Thr Asp Phe Gly Leu Phe Gly Ile Ser Gly Val Val Pro Glu

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465              470              475              480
Gly Arg Arg Glu Asn Gln Leu Lys Leu Ser His Asp Trp Leu Cys Tyr
              485              490              495
Leu Ala Pro Glu Ile Val Arg Glu Met Thr Pro Gly Lys Asp Glu Asp
              500              505              510
Gln Leu Pro Phe Ser Lys Ala Ala Asp Val Tyr Ala Phe Gly Thr Val
              515              520              525
Trp Tyr Glu Leu Gln Ala Arg Asp Trp Pro Leu Lys Asn Gln Ala Ala
              530              535              540
Glu Ala Ser Ile Trp Gln Ile Gly Ser Gly Glu Gly Met Lys Arg Val
545              550              555              560
Leu Thr Ser Val Ser Leu Gly Lys Glu Val Ser Glu Asn Leu Ser Ala
              565              570              575
Cys Trp Ala Phe Asp Leu Gln Glu Arg Pro Ser Phe Ser Leu Leu Met
              580              585              590
Asp Met Leu Glu Lys Leu Pro Lys Leu Asn Arg Arg Leu Ser His Pro
              595              600              605
Gly His Phe Xaa Lys Ser Ala Asp Ile Asn Ser Ser Lys Val Val Pro
              610              615              620
Arg Phe Glu Arg Phe Gly Leu Gly Val Leu Glu Ser Ser Asn Pro Lys
625              630              635              640
Met
641

```

<210> 3762

<211> 527

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(526)

<223> Xaa = any amino acid or nothing

<400> 3762

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Met Ala His Tyr Ile Thr Phe Leu Cys Met Val Leu Val Leu Leu Leu
 1              5              10              15
Gln Asn Ser Val Leu Ala Glu Asp Gly Glu Val Arg Ser Ser Cys Arg
              20              25              30
Thr Ala Pro Thr Asp Leu Val Phe Ile Leu Asp Gly Ser Tyr Ser Val
              35              40              45
Gly Pro Glu Asn Phe Glu Ile Val Lys Lys Trp Leu Val Asn Ile Thr
              50              55              60
Lys Asn Phe Asp Ile Gly Pro Lys Phe Ile Gln Val Gly Val Val Gln
65              70              75              80
Tyr Ser Asp Tyr Pro Val Leu Glu Ile Pro Leu Gly Ser Tyr Asp Ser
              85              90              95
Gly Glu His Leu Thr Ala Ala Val Glu Ser Ile Leu Tyr Leu Gly Gly
              100              105              110
Asn Thr Lys Thr Gly Lys Ala Ile Gln Phe Ala Leu Asp Tyr Leu Phe
              115              120              125
Ala Lys Ser Ser Arg Phe Leu Thr Lys Ile Ala Val Val Leu Thr Asp
              130              135              140
Gly Lys Ser Gln Asp Asp Val Lys Asp Ala Ala Gln Ala Ala Arg Asp
145              150              155              160
Ser Lys Ile Thr Leu Phe Ala Ile Gly Val Gly Ser Glu Thr Glu Asp
              165              170              175
Ala Glu Leu Arg Ala Ile Ala Asn Lys Pro Ser Ser Thr Tyr Val Phe
              180              185              190
Tyr Val Glu Asp Tyr Ile Ala Ile Ser Lys Ile Arg Glu Val Met Lys
              195              200              205
Gln Lys Leu Cys Glu Glu Ser Val Cys Pro Thr Arg Ile Pro Val Ala

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210	215	220
Ala Arg Asp Glu Arg Gly Phe Asp Ile Leu Leu Gly Leu Asp Val Asn		
225	230	235
Lys Lys Val Lys Lys Arg Ile Gln Leu Ser Pro Lys Lys Ile Lys Gly		240
	245	250
Tyr Glu Val Thr Ser Lys Val Asp Leu Ser Glu Leu Thr Ser Asn Val		255
	260	265
Phe Pro Glu Gly Leu Pro Pro Ser Tyr Val Phe Val Ser Thr Gln Arg		270
	275	280
Phe Lys Val Lys Lys Ile Trp Asp Leu Trp Arg Ile Leu Thr Ile Asp		285
	290	295
Gly Xaa Pro Gln Ile Ala Val Thr Leu Asn Gly Val Asp Lys Ile Leu		300
305	310	315
Leu Phe Thr Thr Thr Ser Val Ile Asn Gly Ser Gln Val Val Thr Phe		320
	325	330
Ala Asn Pro Gln Val Lys Thr Leu Phe Asp Glu Gly Trp His Gln Ile		335
	340	345
Arg Leu Leu Val Thr Glu Gln Asp Val Thr Leu Tyr Ile Asp Asp Gln		350
	355	360
Gln Ile Glu Asn Lys Pro Leu His Pro Val Leu Gly Ile Leu Ile Asn		365
	370	375
Gly Gln Thr Gln Ile Gly Lys Tyr Ser Gly Lys Glu Glu Thr Val Gln		380
385	390	395
Phe Asp Val Gln Lys Leu Arg Ile Tyr Cys Asp Pro Glu Gln Asn Asn		400
	405	410
Arg Glu Thr Ala Cys Glu Ile Pro Gly Phe Cys Leu Asn Gly Pro Ser		415
	420	425
Asp Val Gly Ser Thr Pro Ala Pro Cys Ile Cys Pro Pro Gly Lys Pro		430
	435	440
Gly Leu Gln Gly Pro Lys Gly Asp Pro Gly Leu Pro Gly Asn Pro Gly		445
	450	455
Tyr Pro Gly Gln Pro Gly Gln Asp Gly Lys Pro Val Ser Thr Glu Ser		460
465	470	475
Leu Val Ile Ser Gly Ile Ser Gly Ile Thr Gly Tyr Gln Gly Ile Ala		480
	485	490
Gly Thr Pro Gly Val Pro Gly Ser Pro Gly Ile Gln Gly Ala Arg Gly		495
	500	505
Leu Pro Gly Tyr Lys Gly Glu Pro Gly Arg Asp Gly Asp Lys		510
	515	520
		525 526

<210> 3763

<211> 422

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(420)

<223> Xaa = any amino acid or nothing

<400> 3763

Cys Lys Val Trp Arg Asn Pro Leu Asn Leu Phe Arg Gly Ala Glu Tyr
1 5 10 15
Asn Arg Tyr Thr Trp Val Thr Gly Arg Glu Pro Leu Thr Tyr Tyr Asp
20 25 30
Met Asn Leu Ser Ala Gln Asp His Gln Thr Phe Phe Thr Cys Asp Ser
35 40 45
Asp His Leu Arg Pro Ala Asp Ala Ile Met Gln Lys Ala Trp Arg Glu
50 55 60
Arg Asn Pro Gln Ala Arg Ile Ser Ala Ala His Glu Ala Leu Glu Ile
65 70 75 80
Asn Glu Cys Ala Thr Ala Tyr Ile Leu Leu Ala Glu Glu Glu Ala Thr

				85					90					95	
Thr	Ile	Ala	Glu	Ala	Glu	Lys	Leu	Phe	Lys	Gln	Ala	Leu	Lys	Ala	Gly
			100					105					110		
Asp	Gly	Cys	Tyr	Arg	Arg	Ser	Gln	Gln	Leu	Gln	His	His	Gly	Ser	Gln
		115					120					125			
Tyr	Glu	Ala	Gln	His	Ser	Val	Leu	Tyr	Leu	Pro	Leu	Gln	Thr	Arg	His
	130					135					140				
Gln	Cys	Leu	Gly	Val	His	Gln	Lys	Lys	Ala	Ser	Asn	Val	Cys	Gln	Lys
145					150					155					160
Thr	Arg	Glu	Asp	Gln	Gly	Ser	Ser	Glu	Asn	Asp	Glu	Arg	Phe	Asn	Glu
			165					170					175		
Gly	Val	Pro	Pro	Ser	Glu	Tyr	Val	Gln	Tyr	Pro	Xaa	Lys	Pro	Phe	Lys
		180					185					190			
Ala	Leu	Leu	Glu	Leu	Gln	Ala	Tyr	Ala	Asp	Val	Gln	Ala	Val	Leu	Ala
	195					200				205					
Lys	Tyr	Asp	Asp	Ile	Ser	Leu	Pro	Lys	Ser	Ala	Thr	Ile	Cys	Tyr	Thr
	210					215					220				
Ala	Ala	Leu	Leu	Lys	Ala	Arg	Ala	Val	Ser	Asp	Lys	Phe	Ser	Pro	Glu
225				230					235						240
Ala	Ala	Ser	Arg	Arg	Gly	Leu	Ser	Thr	Ala	Glu	Met	Asn	Ala	Val	Glu
			245					250					255		
Ala	Ile	His	Arg	Ala	Val	Glu	Phe	Asn	Pro	His	Val	Pro	Lys	Tyr	Leu
		260					265					270			
Leu	Glu	Met	Lys	Ser	Leu	Ile	Leu	Pro	Pro	Glu	His	Ile	Leu	Lys	Arg
	275					280						285			
Gly	Asp	Ser	Glu	Ala	Ile	Ala	Tyr	Ala	Phe	Phe	His	Leu	Ala	His	Trp
	290					295					300				
Lys	Arg	Val	Glu	Gly	Ala	Leu	Asn	Leu	Leu	His	Cys	Thr	Trp	Glu	Gly
305				310						315					320
Thr	Phe	Arg	Met	Ile	Pro	Tyr	Pro	Leu	Glu	Lys	Gly	His	Leu	Phe	Tyr
			325					330					335		
Pro	Tyr	Pro	Ile	Cys	Thr	Glu	Thr	Ala	Asp	Arg	Glu	Leu	Leu	Pro	Ser
		340					345					350			
Phe	His	Glu	Val	Ser	Val	Tyr	Pro	Lys	Lys	Glu	Leu	Pro	Phe	Phe	Ile
	355					360					365				
Leu	Phe	Thr	Ala	Gly	Leu	Cys	Ser	Phe	Thr	Ala	Met	Leu	Ala	Leu	Leu
	370				375					380					
Thr	His	Gln	Phe	Pro	Glu	Leu	Met	Gly	Val	Phe	Ala	Lys	Ala	Val	Ser
385				390						395					400
Val	Cys	Leu	Glu	Gly	Gly	Leu	Gly	Glu	Trp	Met	Gly	Lys	Ala	Lys	Gly
			405					410					415		
Ile	Lys	Ala	Ala												
		420													

<210> 3764

<211> 336

<212> PRT

<213> Homo sapiens

<400> 3764

Arg	Ser	Ala	Asp	Gly	Leu	Cys	Gly	Asn	Lys	Asp	Arg	Glu	Arg	Gly	Asn
1				5					10					15	
Glu	Phe	Thr	Arg	Asn	Gln	Gln	Ala	Ala	Gln	Glu	Val	Val	Asn	Pro	Lys
		20					25					30			
Lys	Lys	Met	Lys	Lys	Lys	Lys	Tyr	Val	Asn	Ser	Gly	Thr	Val	Thr	Leu
		35					40					45			
Leu	Ser	Phe	Ala	Val	Glu	Ser	Glu	Cys	Thr	Phe	Leu	Asp	Tyr	Ile	Lys
	50					55					60				
Gly	Gly	Thr	Gln	Ile	Asn	Phe	Thr	Val	Ala	Ile	Asp	Phe	Thr	Ala	Ser
	65				70					75				80	
Asn	Gly	Asn	Pro	Ser	Gln	Ser	Thr	Ser	Leu	His	Tyr	Met	Ser	Pro	Tyr

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<210> 3765
<211> 1095
<212> PRT
<213> Homo sapiens
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<400> 3765																
Leu	Gly	Met	Met	Asp	Ser	Pro	Lys	Ile	Gly	Asn	Gly	Leu	Pro	Val	Ile	
1				5					10					15		
Gly	Pro	Gly	Thr	Asp	Ile	Gly	Ile	Ser	Ser	Leu	His	Met	Val	Gly	Tyr	
			20					25					30			
Leu	Gly	Lys	Asn	Phe	Asp	Ser	Ala	Lys	Val	Pro	Ser	Asp	Glu	Tyr	Cys	
		35					40					45				
Pro	Ala	Cys	Lys	Glu	Lys	Gly	Lys	Leu	Lys	Ala	Leu	Lys	Thr	Tyr	Arg	
	50					55					60					
Ile	Ser	Phe	Gln	Glu	Ser	Ile	Phe	Leu	Cys	Glu	Asp	Leu	Gln	Cys	Ile	
65					70				75					80		
Tyr	Pro	Leu	Gly	Ser	Lys	Ser	Leu	Asn	Asn	Leu	Ile	Ser	Pro	Asp	Leu	
				85					90					95		
Glu	Glu	Cys	His	Thr	Pro	His	Lys	Pro	Gln	Lys	Arg	Lys	Ser	Leu	Glu	
			100					105					110			
Ser	Ser	Tyr	Lys	Asp	Ser	Leu	Leu	Leu	Ala	Asn	Ser	Lys	Lys	Thr	Arg	
		115				120						125				
Asn	Tyr	Ile	Ala	Ile	Asp	Gly	Gly	Lys	Val	Leu	Asn	Ser	Lys	His	Asn	
	130					135				140						
Gly	Glu	Val	Tyr	Asp	Glu	Thr	Ser	Ser	Asn	Leu	Pro	Asp	Ser	Ser	Gly	
145					150				155					160		
Gln	Gln	Asn	Pro	Ile	Arg	Thr	Ala	Asp	Ser	Leu	Glu	Arg	Asn	Glu	Ile	
				165					170					175		
Leu	Glu	Ala	Asp	Thr	Val	Asp	Met	Ala	Thr	Thr	Lys	Asp	Pro	Ala	Thr	

5519

690	695	700
Lys Gln Phe Leu Thr Pro Lys Thr Glu Gln Leu Lys Pro Glu Arg Val		
705	710	715
Thr Ser Gln Val Ser Asn Leu Lys Lys Lys Glu Thr Thr Ala Asp Ser		720
	725	730
Gln Thr Thr Thr Ser Lys Ser Leu Gln Asn Gln Ser Leu Lys Glu Asn		735
	740	745
Gln Lys Lys Pro Phe Val Gly Ser Trp Val Lys Gly Leu Ile Ser Arg		750
	755	760
Gly Ala Ser Phe Met Pro Leu Cys Val Ser Ala His Asn Arg Asn Thr		765
	770	775
Ile Thr Asp Leu Gln Pro Ser Val Lys Gly Val Asn Asn Phe Gly Gly		780
	785	790
Phe Lys Thr Lys Gly Ile Asn Gln Lys Ala Ser His Val Ser Lys Lys		795
	805	810
Ala Arg Lys Ser Ala Ser Lys Pro Pro Pro Ile Ser Lys Pro Pro Ala		815
	820	825
Gly Pro Pro Ser Ser Asn Gly Thr Ala Ala His Pro His Ala His Ala		830
	835	840
Ala Ser Glu Val Leu Glu Lys Ser Gly Ser Thr Ser Cys Gly Ala Gln		845
	850	855
Leu Asn His Ser Ser Tyr Gly Asn Gly Ile Ser Ser Ala Asn His Glu		860
	865	870
Asp Leu Val Glu Gly Gln Ile His Lys Leu Arg Leu Lys Leu Arg Lys		875
	885	890
Lys Leu Lys Ala Glu Lys Lys Lys Leu Ala Ala Leu Met Ser Ser Pro		895
	900	905
Gln Ser Arg Thr Val Arg Ser Glu Asn Leu Glu Gln Val Pro Gln Asp		910
	915	920
Gly Ser Pro Asn Asp Cys Glu Ser Ile Glu Asp Leu Leu Asn Glu Leu		925
	930	935
Pro Tyr Pro Ile Asp Ile Ala Asn Glu Ser Ala Cys Thr Thr Val Pro		940
	945	950
Gly Val Ser Leu Tyr Ser Ser Gln Thr His Glu Glu Ile Leu Ala Glu		955
	965	970
Leu Leu Ser Pro Thr Pro Val Ser Thr Glu Leu Ser Glu Asn Gly Glu		975
	980	985
Gly Asp Phe Arg Tyr Leu Gly Met Gly Asp Ser His Ile Pro Pro Pro		990
	995	1000
Val Pro Ser Glu Phe Asn Asp Val Ser Gln Asn Thr His Leu Arg Gln		1005
	1010	1015
Asp His Asn Tyr Cys Ser Pro Thr Lys Lys Asn Pro Cys Glu Val Gln		1020
	1025	1030
Pro Asp Ser Leu Thr Asn Asn Ala Cys Val Arg Thr Leu Asn Leu Glu		1035
	1045	1050
Ser Pro Met Lys Thr Asp Ile Phe Asp Glu Phe Phe Ser Ser Ser Ala		1055
	1060	1065
Leu Asn Ala Leu Ala Asn Asp Thr Leu Asp Leu Pro His Phe Asp Glu		1070
	1075	1080
Tyr Leu Phe Glu Asn Tyr		1085
1090	1094	

<210> 3766

<211> 541

<212> PRT

<213> Homo sapiens

<400> 3766

Ala Gln Gln Ile Val Tyr Arg Asn Val Met Leu Glu Asn Tyr Lys Asn
1 5 10 15
Leu Val Ser Leu Gly Tyr Gln Leu Thr Lys Pro Asp Val Ile Leu Arg

5521

530

535

540

<210> 3767

<211> 541

<212> PRT

<213> Homo sapiens

<400> 3767

Ala Gln Gln Ile Val Tyr Arg Asn Val Met Leu Glu Asn Tyr Lys Asn
 1 5 10 15
 Leu Val Ser Leu Gly Tyr Gln Leu Thr Lys Pro Asp Val Ile Leu Arg
 20 25 30
 Leu Glu Lys Gly Glu Glu Pro Trp Leu Val Glu Arg Glu Ile His Gln
 35 40 45
 Glu Thr His Pro Asp Ser Glu Thr Ala Phe Glu Ile Lys Ser Ser Val
 50 55 60
 Ser Ser Arg Ser Ile Phe Lys Asp Lys Gln Ser Cys Asp Ile Lys Met
 65 70 75 80
 Glu Gly Met Ala Arg Asn Asp Leu Trp Tyr Leu Ser Leu Glu Glu Val
 85 90 95
 Trp Lys Cys Arg Asp Gln Leu Asp Lys Tyr Gln Glu Asn Pro Glu Arg
 100 105 110
 His Leu Arg Gln Val Ala Phe Thr Gln Lys Lys Val Leu Thr Gln Glu
 115 120 125
 Arg Val Ser Glu Ser Gly Lys Tyr Gly Gly Asn Cys Leu Leu Pro Ala
 130 135 140
 Gln Leu Val Leu Arg Glu Tyr Phe His Lys Arg Asp Ser His Thr Lys
 145 150 155 160
 Ser Leu Lys His Asp Leu Val Leu Asn Gly His Gln Asp Ser Cys Ala
 165 170 175
 Ser Asn Ser Asn Glu Cys Gly Gln Thr Phe Cys Gln Asn Ile His Leu
 180 185 190
 Ile Gln Phe Ala Arg Thr His Thr Gly Asp Lys Ser Tyr Lys Cys Pro
 195 200 205
 Asp Asn Asp Asn Ser Leu Thr His Gly Ser Ser Leu Gly Ile Ser Lys
 210 215 220
 Gly Ile His Arg Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Phe
 225 230 235 240
 Phe Ser Trp Arg Ser Asn Leu Thr Arg His Gln Leu Ile His Thr Gly
 245 250 255
 Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ser Phe Ser Arg Ser
 260 265 270
 Ser His Leu Ile Gly His Gln Lys Thr His Thr Gly Glu Glu Pro Tyr
 275 280 285
 Glu Cys Lys Glu Cys Gly Lys Ser Phe Ser Trp Phe Ser His Leu Val
 290 295 300
 Thr His Gln Arg Thr His Thr Gly Asp Lys Leu Tyr Thr Cys Asn Gln
 305 310 315 320
 Cys Gly Lys Ser Phe Val His Ser Ser Arg Leu Ile Arg His Gln Arg
 325 330 335
 Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Pro Glu Cys Gly Lys Ser
 340 345 350
 Phe Arg Gln Ser Thr His Leu Ile Leu His Gln Arg Thr His Val Arg
 355 360 365
 Val Arg Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ser Tyr Ser Gln Arg
 370 375 380
 Ser His Leu Val Val His His Arg Ile His Thr Gly Leu Lys Pro Phe
 385 390 395 400
 Glu Cys Lys Asp Cys Gly Lys Cys Phe Ser Arg Ser Ser His Leu Tyr
 405 410 415
 Ser His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys His Asp


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<210> 3768
<211> 696
<212> PRT
<213> Homo sapiens
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5523

305					310					315				320	
Leu	Gln	Lys	Asp	Lys	Glu	Tyr	Leu	Asn	Arg	Gln	Asn	Met	Glu	Leu	Ser
				325					330					335	
Val	Arg	Cys	Ala	His	Glu	Glu	Asp	Arg	Leu	Glu	Arg	Leu	Gln	Ala	Gln
			340					345					350		
Leu	Glu	Glu	Ser	Lys	Lys	Ala	Arg	Glu	Glu	Met	Tyr	Glu	Lys	Tyr	Val
		355					360					365			
Ala	Ser	Arg	Asp	His	Tyr	Lys	Thr	Glu	Tyr	Glu	Asn	Lys	Leu	His	Asp
	370					375					380				
Glu	Leu	Glu	Gln	Ile	Arg	Leu	Lys	Thr	Asn	Gln	Glu	Ile	Asp	Gln	Leu
385					390				395					400	
Arg	Asn	Ala	Ser	Arg	Glu	Met	Tyr	Glu	Arg	Glu	Asn	Arg	Asn	Leu	Arg
			405						410					415	
Glu	Ala	Arg	Asp	Asn	Ala	Val	Ala	Glu	Lys	Glu	Arg	Ala	Val	Met	Ala
			420					425					430		
Glu	Lys	Asp	Ala	Leu	Glu	Lys	His	Asp	Gln	Leu	Leu	Asp	Arg	Tyr	Arg
		435					440					445			
Glu	Leu	Gln	Leu	Ser	Thr	Glu	Ser	Lys	Val	Thr	Glu	Phe	Leu	His	Gln
	450					455					460				
Ser	Lys	Leu	Lys	Ser	Phe	Glu	Ser	Glu	Arg	Val	Gln	Leu	Leu	Gln	Glu
465				470					475					480	
Glu	Thr	Ala	Arg	Asn	Leu	Thr	Gln	Cys	Gln	Leu	Glu	Cys	Glu	Lys	Tyr
			485					490						495	
Gln	Lys	Lys	Leu	Glu	Val	Leu	Thr	Lys	Glu	Phe	Tyr	Ser	Leu	Gln	Ala
		500						505					510		
Ser	Ser	Glu	Lys	Arg	Ile	Thr	Glu	Leu	Gln	Ala	Gln	Asn	Ser	Glu	His
	515						520					525			
Gln	Ala	Arg	Leu	Asp	Ile	Tyr	Glu	Lys	Leu	Glu	Lys	Glu	Leu	Asp	Glu
	530					535					540				
Ile	Ile	Met	Gln	Thr	Ala	Glu	Ile	Glu	Asn	Glu	Asp	Glu	Ala	Glu	Arg
545				550				555						560	
Val	Leu	Phe	Ser	Tyr	Gly	Tyr	Gly	Ala	Asn	Val	Pro	Thr	Thr	Ala	Lys
			565					570						575	
Arg	Arg	Leu	Lys	Gln	Ser	Val	His	Leu	Ala	Arg	Arg	Val	Leu	Gln	Leu
		580						585					590		
Glu	Lys	Gln	Asn	Ser	Leu	Ile	Leu	Lys	Arg	Ser	Gly	Thr	Ser	Lys	Gly
		595					600					605			
Pro	Ser	Asn	Thr	Ala	Phe	Thr	Arg	Ser	Leu	Thr	Glu	Ala	Asn	Ser	Leu
	610					615					620				
Leu	Asn	Gln	Thr	Gln	Gln	Pro	Tyr	Arg	Tyr	Leu	Ile	Glu	Ser	Val	Arg
625				630				635						640	
Gln	Arg	Asp	Ser	Lys	Ile	Asp	Ser	Leu	Thr	Glu	Ser	Ile	Ala	Gln	Leu
			645					650						655	
Glu	Arg	Lys	Asp	Val	Ser	Asn	Leu	Asn	Lys	Glu	Lys	Ser	Ala	Leu	Leu
		660					665					670			
Gln	Thr	Asn	Gly	Ile	Lys	Met	Ala	Leu	Asp	Leu	Asp	Gln	Leu	Leu	Asn
		675				680						685			
His	Pro														
	690														

<210> 3769

<211> 766

<212> PRT

<213> Homo sapiens

<400> 3769

Asp	Ala	Ala	Glu	Phe	Arg	Val	Val	Ala	Asp	Ala	Met	Lys	Val	Ile	Gly
1				5					10					15	
Phe	Lys	Pro	Glu	Ile	Gln	Thr	Val	Tyr	Lys	Ile	Leu	Ala	Ala	Ile	
		20					25					30			
Leu	His	Leu	Gly	Asn	Leu	Lys	Phe	Val	Val	Asp	Gly	Asp	Thr	Pro	Leu

5525

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545          550          555          560
Lys Val Ala Ala Val Glu Met Leu Lys Gly Gln Arg Ala Asp Leu Gly
          565          570          575
Leu Gln Arg Ala Trp Glu Gly Asn Tyr Leu Ala Ser Lys Pro Asp Thr
          580          585          590
Pro Gln Thr Ser Gly Thr Phe Val Pro Val Ala Asn Glu Leu Lys Arg
          595          600          605
Lys Asp Lys Tyr Met Asn Val Leu Phe Ser Cys His Val Arg Lys Val
          610          615          620
Asn Arg Phe Ser Lys Val Glu Asp Arg Ala Ile Phe Val Thr Asp Arg
          625          630          635
His Leu Tyr Lys Met Asp Pro Thr Lys Gln Tyr Lys Val Met Lys Thr
          645          650          655
Ile Pro Leu Tyr Asn Leu Thr Gly Leu Ser Val Ser Asn Gly Lys Asp
          660          665          670
Gln Leu Val Val Phe His Thr Lys Asp Asn Lys Asp Leu Ile Val Cys
          675          680          685
Leu Phe Ser Lys Gln Pro Thr His Glu Ser Arg Ile Gly Glu Leu Val
          690          695          700
Gly Val Leu Val Asn His Phe Lys Ser Glu Lys Arg His Leu Gln Val
          705          710          715
Asn Val Thr Asn Pro Val Gln Cys Ser Leu His Gly Lys Lys Cys Thr
          725          730          735
Val Ser Val Glu Thr Arg Leu Asn Gln Pro Gln Pro Asp Phe Thr Lys
          740          745          750
Asn Arg Ser Gly Phe Ile Leu Ser Val Pro Gly Asn
          755          760          764

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<210> 3770

<211> 2098

<212> PRT

<213> Homo sapiens

<400> 3770

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His Lys Val Ala Ala Pro Asp Val Val Val Pro Thr Leu Asp Thr Val
1          5          10          15
Arg His Glu Ala Leu Leu Tyr Thr Trp Leu Ala Glu His Lys Pro Leu
          20          25          30
Val Leu Cys Gly Pro Pro Gly Ser Gly Lys Thr Met Thr Leu Phe Ser
          35          40          45
Ala Leu Arg Ala Leu Pro Asp Met Glu Val Val Gly Leu Asn Phe Ser
          50          55          60
Ser Ala Thr Thr Pro Glu Leu Leu Leu Lys Thr Phe Asp His Tyr Cys
          65          70          75          80
Glu Tyr Arg Arg Thr Pro Asn Gly Val Val Leu Ala Pro Val Gln Leu
          85          90          95
Gly Lys Trp Leu Val Leu Phe Cys Asp Glu Ile Asn Leu Pro Asp Met
          100          105          110
Asp Lys Tyr Gly Thr Gln Arg Val Ile Ser Phe Ile Arg Gln Met Val
          115          120          125
Glu His Gly Gly Phe Tyr Arg Thr Ser Asp Gln Thr Trp Val Lys Leu
          130          135          140
Glu Arg Ile Gln Phe Val Gly Ala Cys Asn Pro Pro Thr Asp Pro Gly
          145          150          155          160
Arg Lys Pro Leu Ser His Arg Phe Leu Arg His Val Pro Val Val Tyr
          165          170          175
Val Asp Tyr Pro Gly Pro Ala Ser Leu Thr Gln Ile Tyr Gly Thr Phe
          180          185          190
Asn Arg Ala Met Leu Arg Leu Ile Pro Ser Leu Arg Thr Tyr Ala Glu
          195          200          205
Pro Leu Thr Ala Ala Met Val Glu Phe Tyr Thr Met Ser Gln Glu Arg

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210	215	220		
Phe Thr Gln Asp Thr Gln Pro His Tyr Ile Tyr Ser Pro Arg Glu Met				
225	230	235	240	
Thr Arg Trp Val Arg Gly Ile Phe Glu Ala Leu Arg Pro Leu Glu Thr				
	245	250	255	
Leu Pro Val Glu Gly Leu Ile Arg Ile Trp Ala His Glu Ala Leu Arg				
	260	265	270	
Leu Phe Gln Asp Arg Leu Val Glu Asp Glu Glu Arg Arg Trp Thr Asp				
	275	280	285	
Glu Asn Ile Asp Thr Val Ala Leu Lys His Phe Pro Asn Ile Asp Arg				
	290	295	300	
Glu Lys Ala Met Ser Arg Pro Ile Leu Tyr Ser Asn Trp Leu Ser Lys				
305	310	315	320	
Asp Tyr Ile Pro Val Asp Gln Glu Glu Leu Arg Asp Tyr Val Lys Ala				
	325	330	335	
Arg Leu Lys Val Phe Tyr Glu Glu Glu Leu Asp Val Pro Leu Val Leu				
	340	345	350	
Phe Asn Glu Val Leu Asp His Val Leu Arg Ile Asp Arg Ile Phe Arg				
	355	360	365	
Gln Pro Gln Gly His Leu Leu Leu Ile Gly Val Ser Gly Ala Gly Lys				
	370	375	380	
Thr Thr Leu Ser Arg Phe Val Ala Trp Met Asn Gly Leu Ser Val Tyr				
385	390	395	400	
Gln Ile Lys Val His Arg Lys Tyr Thr Gly Glu Asp Phe Asp Glu Asp				
	405	410	415	
Leu Arg Thr Val Leu Arg Arg Ser Gly Cys Lys Asn Glu Lys Ile Ala				
	420	425	430	
Phe Ile Met Asp Glu Ser Asn Val Leu Asp Ser Gly Phe Leu Glu Arg				
	435	440	445	
Met Asn Thr Leu Leu Ala Asn Gly Glu Val Pro Gly Leu Phe Glu Gly				
	450	455	460	
Asp Glu Tyr Ala Thr Leu Met Thr Gln Cys Lys Glu Gly Ala Gln Lys				
465	470	475	480	
Glu Gly Leu Met Leu Asp Ser His Glu Glu Leu Tyr Lys Trp Phe Thr				
	485	490	495	
Ser Gln Val Ile Arg Asn Leu His Val Val Phe Thr Met Asn Pro Ser				
	500	505	510	
Ser Glu Gly Leu Lys Asp Arg Ala Ala Thr Ser Pro Ala Leu Phe Asn				
	515	520	525	
Arg Cys Val Leu Asn Trp Phe Gly Asp Trp Ser Thr Glu Ala Leu Tyr				
	530	535	540	
Gln Val Gly Lys Glu Phe Thr Ser Lys Met Asp Leu Glu Lys Pro Asn				
545	550	555	560	
Tyr Ile Val Pro Asp Tyr Met Pro Val Val Tyr Asp Lys Leu Pro Gln				
	565	570	575	
Pro Pro Ser His Arg Glu Ala Ile Val Asn Ser Cys Val Phe Val His				
	580	585	590	
Gln Thr Leu His Gln Ala Asn Ala Arg Leu Ala Lys Arg Gly Gly Arg				
	595	600	605	
Thr Met Ala Ile Thr Pro Arg His Tyr Leu Asp Phe Ile Asn His Tyr				
	610	615	620	
Ala Asn Leu Phe His Glu Lys Arg Ser Glu Leu Glu Glu Gln Gln Met				
625	630	635	640	
His Leu Asn Val Gly Leu Arg Lys Ile Lys Glu Thr Val Asp Gln Val				
	645	650	655	
Glu Glu Leu Arg Arg Asp Leu Arg Ile Lys Ser Gln Glu Leu Glu Val				
	660	665	670	
Lys Asn Ala Ala Ala Asn Asp Lys Leu Lys Lys Met Val Lys Asp Gln				
	675	680	685	
Gln Glu Ala Glu Lys Lys Lys Val Met Ser Gln Glu Ile Gln Glu Gln				
	690	695	700	
Leu His Lys Gln Gln Glu Val Ile Ala Asp Lys Gln Met Ser Val Lys				
705	710	715	720	
Glu Asp Leu Asp Lys Val Glu Pro Ala Val Ile Glu Ala Gln Asn Ala				

5528

1235	1240	1245
Cys Ser Ser Ile Tyr Phe Thr Met Glu Ser Leu Lys Gln Ile His Phe		
1250	1255	1260
Leu Tyr Gln Tyr Ser Leu Gln Phe Phe Leu Asp Ile Tyr His Asn Val		
1265	1270	1275
Leu Tyr Glu Asn Pro Asn Leu Lys Gly Val Thr Asp His Thr Gln Arg		1280
	1285	1290
Leu Ser Ile Ile Thr Lys Asp Leu Phe Gln Val Ala Phe Asn Arg Val		
	1300	1305
Ala Arg Gly Met Leu His Gln Asp His Ile Thr Phe Ala Met Leu Leu		1310
	1315	1320
Ala Arg Ile Lys Leu Lys Gly Thr Val Gly Glu Pro Thr Tyr Asp Ala		1325
	1330	1335
Glu Phe Gln His Phe Leu Arg Gly Asn Glu Ile Val Leu Ser Ala Gly		1340
1345	1350	1355
Ser Thr Pro Arg Ile Gln Gly Leu Thr Val Glu Gln Ala Glu Ala Val		1360
	1365	1370
Val Arg Leu Ser Cys Leu Pro Ala Phe Lys Asp Leu Ile Ala Lys Val		1375
	1380	1385
Gln Ala Asp Glu Gln Phe Gly Ile Trp Leu Asp Ser Ser Ser Pro Glu		1390
	1395	1400
Gln Thr Val Pro Tyr Leu Trp Ser Glu Glu Thr Pro Ala Thr Pro Ile		1405
	1410	1415
Gly Gln Ala Ile His Arg Leu Leu Leu Ile Gln Ala Phe Arg Pro Asp		1420
1425	1430	1435
Arg Leu Leu Ala Met Ala His Met Phe Val Ser Thr Asn Leu Gly Glu		1440
	1445	1450
Ser Phe Met Ser Ile Met Glu Gln Pro Leu Asp Leu Thr Gln Ile Val		1455
	1460	1465
Gly Thr Glu Val Lys Pro Asn Thr Pro Val Leu Met Cys Ser Val Pro		1470
	1475	1480
Gly Tyr Asp Ala Ser Gly His Val Glu Asp Leu Ala Ala Glu Gln Asn		1485
	1490	1495
Thr Gln Ile Thr Ser Ile Ala Ile Gly Ser Ala Glu Gly Phe Asn Gln		1500
1505	1510	1515
Ala Asp Lys Ala Ile Asn Thr Ala Val Lys Ser Gly Arg Trp Val Met		1520
	1525	1530
Leu Lys Asn Val His Leu Ala Pro Gly Trp Leu Met Gln Leu Glu Lys		1535
	1540	1545
Lys Leu His Ser Leu Gln Pro His Ala Cys Phe Arg Leu Phe Leu Thr		1550
	1555	1560
Met Glu Ile Asn Pro Lys Val Pro Val Asn Leu Leu Arg Ala Gly Arg		1565
	1570	1575
Ile Phe Val Phe Glu Pro Pro Gly Val Lys Ala Asn Met Leu Arg		1580
1585	1590	1595
Thr Phe Ser Ser Ile Pro Val Ser Arg Ile Cys Lys Ser Pro Asn Glu		1600
	1605	1610
Arg Ala Arg Leu Tyr Phe Leu Leu Ala Trp Phe His Ala Ile Ile Gln		1615
	1620	1625
Glu Arg Leu Arg Tyr Ala Pro Leu Gly Trp Ser Lys Lys Tyr Glu Phe		1630
	1635	1640
Gly Glu Ser Asp Leu Arg Ser Ala Cys Asp Thr Val Asp Thr Trp Leu		1645
	1650	1655
Asp Asp Thr Ala Lys Gly Arg Gln Asn Ile Ser Pro Asp Lys Ile Pro		1660
1665	1670	1675
Trp Ser Ala Leu Lys Thr Leu Met Ala Gln Ser Ile Tyr Gly Gly Arg		1680
	1685	1690
Val Asp Asn Glu Phe Asp Gln Arg Leu Leu Asn Thr Phe Leu Glu Arg		1695
	1700	1705
Leu Phe Thr Thr Arg Ser Phe Asp Ser Glu Phe Lys Leu Ala Cys Lys		1710
	1715	1720
Val Asp Gly His Lys Asp Ile Gln Met Pro Asp Gly Ile Arg Arg Glu		1725
	1730	1735
Glu Phe Val Gln Trp Val Glu Leu Leu Pro Asp Thr Gln Thr Pro Ser		1740

1745 1750 1755 1760
 Trp Leu Gly Leu Pro Asn Asn Ala Glu Arg Val Leu Leu Thr Thr Gln
 1765 1770 1775
 Gly Val Asp Met Ile Ser Lys Met Leu Lys Met Gln Met Leu Glu Asp
 1780 1785 1790
 Glu Asp Asp Leu Ala Tyr Ala Glu Thr Glu Lys Lys Thr Arg Thr Asp
 1795 1800 1805
 Ser Thr Ser Asp Gly Arg Pro Ala Trp Met Arg Thr Leu His Thr Thr
 1810 1815 1820
 Ala Ser Asn Trp Leu His Leu Ile Pro Gln Thr Leu Ser His Leu Lys
 1825 1830 1835 1840
 Arg Thr Val Glu Asn Ile Lys Asp Pro Leu Phe Arg Phe Phe Glu Arg
 1845 1850 1855
 Glu Val Lys Met Gly Ala Lys Leu Leu Gln Asp Val Arg Gln Asp Leu
 1860 1865 1870
 Ala Asp Val Val Gln Val Cys Glu Gly Lys Lys Lys Gln Thr Asn Tyr
 1875 1880 1885
 Leu Arg Thr Leu Ile Asn Glu Leu Val Lys Gly Ile Leu Pro Arg Ser
 1890 1895 1900
 Trp Ser His Tyr Thr Val Pro Ala Gly Met Thr Val Ile Gln Trp Gly
 1905 1910 1915 1920
 Val Pro Ile Ser Ala Arg Arg Ile Lys Gln Leu Gln Asn Ile Ser Leu
 1925 1930 1935
 Ala Ala Ala Ser Gly Gly Ala Lys Glu Leu Lys Asn Ile His Val Cys
 1940 1945 1950
 Leu Gly Gly Leu Phe Val Pro Glu Ala Tyr Ile Thr Ala Thr Arg Gln
 1955 1960 1965
 Tyr Val Ala Gln Ala Asn Ser Trp Ser Leu Glu Glu Leu Cys Leu Glu
 1970 1975 1980
 Val Asn Val Thr Thr Ser Gln Gly Ala Thr Leu Asp Ala Cys Ser Phe
 1985 1990 1995 2000
 Gly Val Thr Gly Leu Lys Leu Gln Gly Ala Thr Cys Asn Asn Asn Lys
 2005 2010 2015
 Leu Ser Leu Ser Asn Ala Ile Ser Thr Ala Leu Pro Leu Thr Gln Leu
 2020 2025 2030
 Arg Trp Val Lys Gln Thr Asn Thr Glu Lys Lys Ala Ser Val Val Thr
 2035 2040 2045
 Leu Pro Val Tyr Leu Asn Phe Thr Arg Ala Asp Leu Ile Phe Thr Val
 2050 2055 2060
 Asp Phe Glu Ile Ala Thr Lys Glu Asp Pro Arg Ser Phe Tyr Glu Arg
 2065 2070 2075 2080
 Gly Val Ala Val Leu Cys Thr Glu
 2085 2088

<210> 3771

<211> 685

<212> PRT

<213> Homo sapiens

<400> 3771

Leu Pro Leu Leu His Ala Gly Phe Asn Arg Arg Phe Met Glu Asn Ser
 1 5 10 15
 Ser Ile Ile Ala Cys Tyr Asn Glu Leu Ile Gln Ile Glu His Gly Glu
 20 25 30
 Val Arg Ser Gln Phe Lys Leu Arg Ala Cys Asn Ser Val Phe Thr Ala
 35 40 45
 Leu Asp His Cys His Glu Ala Ile Glu Ile Thr Ser Asp Asp His Val
 50 55 60
 Ile Gln Tyr Val Asn Pro Ala Phe Glu Arg Met Met Gly Tyr His Lys
 65 70 75 80
 Gly Glu Leu Leu Gly Lys Glu Leu Ala Asp Leu Pro Lys Ser Asp Lys

5531

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<210> 3772
<211> 323
<212> PRT
<213> Homo sapiens
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5532

<210> 3773
 <211> 320
 <212> PRT
 <213> Homo sapiens

<400> 3773
 Ala Ala Ala Arg Glu Ser Glu Arg Gln Leu Arg Leu Arg Leu Cys Val
 1 5 10 15
 Leu Asn Glu Ile Leu Gly Thr Glu Arg Asp Tyr Val Gly Thr Leu Arg
 20 25 30
 Phe Leu Gln Ser Ala Phe Leu His Arg Ile Arg Gln Asn Val Ala Asp
 35 40 45
 Ser Val Glu Lys Gly Leu Thr Glu Glu Asn Val Lys Val Leu Phe Ser
 50 55 60
 Asn Ile Glu Asp Ile Leu Glu Val His Lys Asp Phe Leu Ala Ala Leu
 65 70 75 80
 Glu Tyr Cys Leu His Pro Glu Pro Gln Ser Gln His Glu Leu Gly Asn
 85 90 95
 Val Phe Leu Lys Phe Lys Asp Lys Phe Cys Val Tyr Glu Glu Tyr Cys
 100 105 110
 Ser Asn His Glu Lys Ala Leu Arg Leu Leu Val Glu Leu Asn Lys Ile
 115 120 125
 Pro Thr Val Arg Ala Phe Leu Leu Ser Cys Met Leu Leu Gly Gly Arg
 130 135 140
 Lys Thr Thr Asp Ile Pro Leu Glu Gly Tyr Leu Leu Ser Pro Ile Gln
 145 150 155 160
 Arg Ile Cys Lys Tyr Pro Leu Leu Leu Lys Glu Leu Ala Lys Arg Thr
 165 170 175
 Pro Gly Lys His Pro Asp His Pro Ala Val Gln Ser Ala Leu Gln Ala
 180 185 190
 Met Lys Thr Val Cys Ser Asn Ile Asn Glu Thr Lys Arg Gln Met Glu
 195 200 205
 Lys Leu Glu Ala Leu Glu Ala Ala Gln Ser His Ile Glu Gly Trp
 210 215 220
 Glu Gly Ser Asn Leu Thr Asp Ile Cys Thr Gln Leu Leu Leu Gln Gly
 225 230 235 240
 Thr Leu Leu Lys Ile Ser Ala Gly Asn Ile Gln Glu Arg Ala Phe Phe
 245 250 255
 Leu Phe Asp Asn Leu Leu Val Tyr Cys Lys Arg Lys Ser Arg Val Thr
 260 265 270
 Gly Ser Lys Lys Ser Thr Lys Arg Thr Lys Ser Ile Asn Gly Ser Leu
 275 280 285
 Tyr Ile Phe Arg Gly Arg Ile Asn Thr Glu Val Met Glu Val Glu Asn
 290 295 300
 Val Glu Asp Gly Thr Gly Ser Pro Ser Pro Ser Leu Ala
 305 310 315 317

<210> 3774
 <211> 733
 <212> PRT
 <213> Homo sapiens

<400> 3774
 Glu Leu Gln Gly Asp Phe Ser Val Pro Asp Val Pro Lys Ser Met Ala
 1 5 10 15
 Trp Cys Glu Asn Ser Ile Cys Val Gly Phe Lys Arg Asp Tyr Tyr Leu
 20 25 30
 Ile Arg Val Asp Gly Lys Gly Ser Ile Lys Glu Leu Phe Pro Thr Gly

5534

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545          550          555          560
Thr Arg Met Ala Glu Glu Tyr Cys His Lys His Tyr Asp Arg Asn Lys
          565          570          575
Asp Gly Asn Lys Asp Val Tyr Leu Ser Leu Leu Arg Met Tyr Leu Ser
          580          585          590
Pro Pro Ser Ile His Cys Leu Gly Pro Ile Lys Leu Glu Leu Leu Glu
          595          600          605
Pro Lys Ala Asn Leu Gln Ala Ala Leu Gln Val Leu Glu Leu His His
        610          615          620
Ser Lys Leu Asp Thr Thr Lys Ala Leu Asn Leu Leu Pro Ala Asn Thr
        625          630          635
Gln Ile Asn Asp Ile Arg Ile Phe Leu Glu Lys Val Leu Glu Glu Asn
          645          650          655
Ala Gln Lys Lys Arg Phe Asn Gln Val Leu Lys Asn Leu Leu His Ala
          660          665          670
Glu Phe Leu Arg Val Gln Glu Glu Arg Ile Leu His Gln Gln Val Lys
          675          680          685
Cys Ile Ile Thr Glu Glu Lys Val Cys Met Val Cys Lys Lys Lys Ile
        690          695          700
Gly Asn Ser Ala Phe Ala Arg Tyr Pro Asn Gly Val Val Val His Tyr
        705          710          715          720
Phe Cys Ser Lys Glu Val Asn Pro Ala Asp Thr
          725          730 731

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<210> 3775
 <211> 332
 <212> PRT
 <213> Homo sapiens

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          <400> 3775
Met Ser Arg Ala Arg Gly Ala Leu Cys Arg Ala Cys Leu Ala Leu Ala
  1          5          10          15
Ala Ala Leu Ala Ala Leu Leu Leu Leu Pro Leu Pro Leu Pro Arg Ala
          20          25          30
Pro Ala Pro Ala Arg Thr Pro Ala Pro Ala Pro Arg Ala Pro Pro Ser
          35          40          45
Arg Pro Ala Ala Pro Ser Leu Arg Pro Asp Asp Val Phe Ile Ala Val
          50          55          60
Lys Thr Thr Arg Lys Asn His Gly Pro Arg Leu Arg Leu Leu Leu Arg
          65          70          75          80
Thr Trp Ile Ser Arg Ala Arg Gln Gln Thr Phe Ile Phe Thr Asp Gly
          85          90          95
Asp Asp Pro Glu Leu Glu Leu Gln Gly Gly Asp Arg Val Ile Asn Thr
          100          105          110
Asn Cys Ser Ala Val Arg Thr Arg Gln Ala Leu Cys Cys Lys Met Ser
          115          120          125
Val Glu Tyr Asp Lys Phe Ile Glu Ser Gly Arg Lys Trp Phe Cys His
          130          135          140
Val Asp Asp Asp Asn Tyr Val Asn Ala Arg Ser Leu Leu His Leu Leu
          145          150          155          160
Ser Ser Phe Ser Pro Ser Gln Asp Val Tyr Leu Gly Arg Pro Ser Leu
          165          170          175
Asp His Pro Ile Glu Ala Thr Glu Arg Val Gln Gly Gly Arg Thr Val
          180          185          190
Thr Thr Val Lys Phe Trp Phe Ala Thr Gly Gly Ala Gly Phe Cys Leu
          195          200          205
Ser Arg Gly Leu Ala Leu Lys Met Ser Pro Trp Ala Ser Leu Gly Ser
          210          215          220
Phe Met Ser Thr Ala Glu Gln Val Arg Leu Pro Asp Asp Cys Thr Val
          225          230          235          240
Gly Tyr Ile Val Glu Gly Leu Leu Gly Ala Arg Leu Leu His Ser Pro

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<210> 3776
<211> 265
<212> PRT
<213> Homo sapiens
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<210> 3777
<211> 138
<212> PRT
<213> Homo sapiens
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<400> 3777

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Ser Glu Glu Asp Val Ile Glu Gly Lys Thr Ala Val Ile Glu Lys Arg
 1           5           10           15
Arg Lys Lys Arg Ser Ser Ala Gly Val Val Glu Asp Ile Gly Gly Glu
          20           25           30
Val Gln Asn Met Leu Glu Gly Val Gly Val Asp Ile Asn Lys Ala Leu
          35           40           45
Leu Ala Lys Arg Lys Arg Leu Glu Met Tyr Thr Lys Ala Ser Leu Arg
          50           55           60
Thr Ser Asn Gln Lys Ile Glu His Val Trp Lys Thr Gln Gln Asp Gln
          65           70           75           80
Arg Gln Lys Leu Asn Gln Glu Tyr Ser Gln Gln Phe Leu Thr Leu Phe
          85           90           95
Gln Gln Trp Asp Leu Asp Met Gln Lys Ala Glu Glu Gln Glu Glu Lys
          100          105          110
Ile Leu Val Gly Ile Met Ile Arg Phe Ile Ile Asn Gln Val Ser Ser
          115          120          125
Arg Asn Gly Gln Pro Ser Leu Leu Leu
          130          135          137

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<210> 3778

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3778

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Ser Arg Leu Pro Pro Pro Pro His Leu Ala Asp Gly Arg Ala Gly
 1           5           10           15
Ala Arg Val Pro Arg Ser Ala Arg Leu Ser Arg Trp Trp Val Gln Asp
          20           25           30
Trp Thr His Gly Pro Ile Val Arg Pro Pro Ala Ala Ala Arg Thr Met
          35           40           45
Trp Val Asn Pro Glu Glu Val Leu Leu Ala Asn Ala Leu Trp Ile Thr
          50           55           60
Glu Arg Ala Asn Pro Tyr Phe Ile Leu Gln Arg Arg Lys Gly His Ala
          65           70           75           80
Gly Asp Gly Gly Gly Gly Gly Gly Leu Ala Gly Leu Leu Val Gly Thr
          85           90           95
Leu Asp Val Val Leu Asp Ser Ser Ala Arg Val Ala Pro Tyr Arg Ile
          100          105          110
Leu Tyr Gln Thr Pro Asp Ser Leu Val Tyr Trp Thr Ile Ala Cys Gly
          115          120          125
Gly Ser Arg Lys Glu Ile Thr Glu His Trp Glu Trp Leu Glu Gln Asn
          130          135          140
Leu Leu Gln Thr Leu Ser Ile Phe Glu Asn Glu Asn Asp Ile Thr Thr
          145          150          155          160
Phe Val Arg Gly Lys Ile Gln Gly Ile Ile Ala Glu Tyr Asn Lys Ile
          165          170          175
Asn Asp Val Lys Glu Asp Asp Asp Thr Glu Lys Phe Lys Glu Ala Ile
          180          185          190
Val Lys Phe His Arg Leu Phe Gly Met Pro Glu Glu Glu Lys Leu Val
          195          200          205
Asn Tyr Tyr Ser Cys Ser Tyr Trp Lys Gly
          210          215          218

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<210> 3779

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3779

Cys Lys Ser Cys Thr Leu Phe Pro Gln Asn Pro Asn Leu Pro Pro Pro
 1 5 10 15
 Ser Thr Arg Glu Arg Pro Pro Gly Cys Lys Thr Val Phe Val Gly Gly
 20 25 30
 Leu Pro Glu Asn Ala Thr Glu Glu Ile Ile Gln Glu Val Phe Glu Gln
 35 40 45
 Cys Gly Asp Ile Thr Ala Ile Arg Lys Ser Lys Lys Asn Phe Cys His
 50 55 60
 Ile Arg Phe Ala Glu Glu Phe Met Val Asp Lys Ala Ile Tyr Leu Ser
 65 70 75 80
 Gly Tyr Arg Met Arg Leu Gly Ser Ser Thr Asp Lys Lys Asp Ser Gly
 85 90 95
 Arg Leu His Val Asp Phe Ala Gln Ala Arg Asp Asp Phe Tyr Glu Trp
 100 105 110
 Glu Cys Lys Gln Arg Met Arg Ala Arg Glu Glu Arg His Arg Arg Lys
 115 120 125
 Leu Glu Glu Asp Arg Leu Arg Pro Pro Ser Pro Pro Ala Ile Met His
 130 135 140
 Tyr Ser Glu His Glu Ala Ala Leu Leu Ala Glu Lys Leu Lys Asp Asp
 145 150 155 160
 Ser Lys Phe Ser Glu Ala Met Gln Val Leu Leu Ser Trp Ile Glu Arg
 165 170 175
 Gly Glu Val Asn Arg Arg Ser Ala Asn Gln Phe Tyr Ser Met Val Gln
 180 185 190
 Ser Ala Asn Ser His Val Arg Arg Leu Met Asn Glu Lys Ala Thr His
 195 200 205
 Glu Gln Glu Met Glu Glu Ala Lys Glu Asn Phe Lys Asn Ala Leu Thr
 210 215 220
 Gly Ile Leu Thr Gln Phe Glu Gln Ile Val Ala Val Phe Asn Ala Ser
 225 230 235 240
 Thr Arg Gln Lys Ala Trp Asp His Phe Ser Lys Ala Gln Arg Lys Asn
 245 250 255
 Ile Asp Ile Trp Ala Lys His Ser Glu Glu Leu Arg Asn Ala Gln Ser
 260 265 270
 Glu Gln Leu Met Gly Ile Arg Arg Glu Glu Glu Met Glu Met Ser Asp
 275 280 285
 Asp Glu Asn Cys Asp Ser Pro Thr Lys Lys Met Arg Val Asp Glu Ser
 290 295 300
 Ala Leu Gly Ala Pro
 305 309

<210> 3780

<211> 845

<212> PRT

<213> Homo sapiens

<400> 3780

Ala Ala Gln Ala Glu Arg Glu Glu Leu Ala Ala Gly Arg Met Pro Gly
 1 5 10 15
 Gly Gly Pro Gln Gly Ala Pro Ala Ala Ala Gly Gly Gly Gly Val Ser
 20 25 30
 His Arg Ala Gly Ser Arg Asp Cys Leu Pro Pro Ala Ala Cys Phe Arg
 35 40 45
 Arg Arg Arg Leu Ala Arg Arg Pro Gly Tyr Met Arg Ser Ser Thr Gly
 50 55 60
 Pro Gly Ile Gly Phe Leu Ser Pro Ala Val Gly Thr Leu Phe Arg Phe
 65 70 75 80
 Pro Gly Gly Val Ser Gly Glu Glu Ser His His Ser Glu Ser Arg Ala

										85											90											95		
Arg	Gln	Cys	Gly	Leu	Asp	Ser	Arg	Gly	Leu	Leu	Val	Arg	Ser	Pro	Val																			
			100					105						110																				
Ser	Lys	Ser	Ala	Ala	Ala	Pro	Thr	Val	Thr	Ser	Val	Arg	Gly	Thr	Ser																			
		115					120						125																					
Ala	His	Phe	Gly	Ile	Gln	Leu	Arg	Gly	Gly	Thr	Arg	Leu	Pro	Asp	Arg																			
	130					135						140																						
Leu	Ser	Trp	Pro	Cys	Gly	Pro	Gly	Ser	Ala	Gly	Trp	Gln	Gln	Glu	Phe																			
145					150					155				160																				
Ala	Ala	Met	Asp	Ser	Ser	Glu	Thr	Leu	Asp	Ala	Ser	Trp	Glu	Ala	Ala																			
			165						170					175																				
Cys	Ser	Asp	Gly	Ala	Arg	Arg	Val	Arg	Ala	Ala	Gly	Ser	Leu	Pro	Ser																			
			180					185						190																				
Ala	Glu	Leu	Ser	Ser	Asn	Ser	Cys	Ser	Pro	Gly	Cys	Gly	Pro	Glu	Val																			
	195					200							205																					
Pro	Pro	Thr	Pro	Pro	Gly	Ser	His	Ser	Ala	Phe	Thr	Ser	Ser	Phe	Ser																			
	210				215								220																					
Phe	Ile	Arg	Leu	Ser	Leu	Gly	Ser	Ala	Gly	Glu	Arg	Gly	Glu	Ala	Glu																			
225					230					235				240																				
Gly	Cys	Pro	Pro	Ser	Arg	Glu	Ala	Glu	Ser	His	Cys	Gln	Ser	Pro	Gln																			
				245				250						255																				
Glu	Met	Gly	Ala	Lys	Ala	Ala	Ser	Leu	Asp	Gly	Pro	His	Glu	Asp	Pro																			
		260						265					270																					
Arg	Cys	Leu	Ser	Gln	Pro	Phe	Ser	Leu	Leu	Ala	Thr	Arg	Val	Ser	Ala																			
	275					280							285																					
Asp	Leu	Ala	Gln	Ala	Ala	Arg	Asn	Ser	Ser	Arg	Pro	Glu	Arg	Asp	Met																			
	290					295					300																							
His	Ser	Leu	Pro	Asp	Met	Asp	Pro	Gly	Ser	Ser	Ser	Ser	Leu	Asp	Pro																			
305					310					315				320																				
Ser	Leu	Ala	Gly	Cys	Gly	Gly	Asp	Gly	Ser	Ser	Gly	Ser	Gly	Asp	Ala																			
				325				330						335																				
His	Ser	Trp	Asp	Thr	Leu	Leu	Arg	Lys	Trp	Glu	Pro	Val	Leu	Arg	Asp																			
		340						345					350																					
Cys	Leu	Leu	Arg	Asn	Arg	Arg	Gln	Met	Glu	Val	Ile	Ser	Leu	Arg	Leu																			
	355					360							365																					
Lys	Leu	Gln	Lys	Leu	Gln	Glu	Asp	Ala	Val	Glu	Asn	Asp	Asp	Tyr	Asp																			
	370					375						380																						
Lys	Ala	Glu	Thr	Leu	Gln	Gln	Arg	Leu	Glu	Asp	Leu	Glu	Gln	Glu	Lys																			
385					390					395				400																				
Ile	Ser	Leu	His	Phe	Gln	Leu	Pro	Ser	Arg	Gln	Pro	Ala	Leu	Ser	Ser																			
				405				410						415																				
Phe	Leu	Gly	His	Leu	Ala	Ala	Gln	Val	Gln	Ala	Ala	Leu	Arg	Arg	Gly																			
		420						425					430																					
Ala	Thr	Gln	Ala	Ser	Gly	Asp	Thr	His	Thr	Pro	Leu	Arg	Met																					
	435					440						445																						
Glu	Pro	Arg	Leu	Leu	Glu	Pro	Thr	Ala	Gln	Asp	Ser	Leu	His	Val	Ser																			
	450					455						460																						
Ile	Thr	Arg	Arg	Asp	Trp	Leu	Leu	Gln	Glu	Lys	Gln	Gln	Leu	Gln	Lys																			
465					470					475				480																				
Glu	Ile	Glu	Ala	Leu	Gln	Ala	Arg	Met	Phe	Val	Leu	Glu	Ala	Lys	Asp																			
				485				490					495																					
Gln	Gln	Leu	Arg	Arg	Glu	Ile	Glu	Glu	Gln	Glu	Gln	Gln	Leu	Gln	Trp																			
		500						505					510																					
Gln	Gly	Cys	Asp	Leu	Thr	Pro	Leu	Val	Gly	Gln	Leu	Ser	Leu	Gly	Gln																			
	515					520							525																					
Leu	Gln	Glu	Val	Ser	Lys	Ala	Leu	Gln	Asp	Thr	Leu	Ala	Ser	Ala	Gly																			
	530					535						540																						
Gln	Ile	Pro	Phe	His	Ala	Glu	Pro	Pro	Glu	Thr	Ile	Arg	Ser	Leu	Gln																			
545					550					555				560																				
Glu	Arg	Ile	Lys	Ser	Leu	Asn	Leu	Ser	Leu	Lys	Glu	Ile	Thr	Thr	Lys																			
				565				570						575																				
Val	Cys	Met	Ser	Glu	Lys	Phe	Cys	Ser	Thr	Leu	Arg	Lys	Lys	Val	Asn																			
			580					585					590																					
Asp	Ile	Glu	Thr	Gln	Leu	Pro	Ala	Leu	Leu	Glu	Ala	Lys	Met	His	Ala																			

595	600	605
Ile Ser Gly Asn His Phe Trp Thr Ala Lys Asp Leu Thr Glu Glu Ile		
610	615	620
Arg Ser Leu Thr Ser Asp Arg Glu Gly Leu Glu Gly Leu Leu Ser Lys		
625	630	635
Leu Leu Val Leu Ser Ser Arg Asn Val Lys Lys Leu Gly Ser Val Lys		
645	650	655
Glu Asp Tyr Asn Arg Leu Arg Arg Glu Val Glu His Gln Glu Thr Ala		
660	665	670
Tyr Glu Thr Ser Val Lys Glu Asn Thr Met Lys Tyr Met Glu Thr Leu		
675	680	685
Lys Asn Lys Leu Cys Ser Cys Lys Cys Pro Leu Leu Gly Lys Val Trp		
690	695	700
Glu Ala Asp Leu Glu Ala Cys Arg Leu Leu Ile Gln Cys Leu Gln Leu		
705	710	715
Gln Glu Ala Arg Gly Ser Leu Ser Val Glu Asp Glu Arg Gln Met Asp		
725	730	735
Asp Leu Glu Gly Ala Ala Pro Pro Ile Pro Pro Arg Leu His Ser Glu		
740	745	750
Asp Lys Arg Lys Thr Pro Leu Lys Glu Ser Tyr Ile Leu Ser Ala Glu		
755	760	765
Leu Gly Glu Lys Cys Glu Asp Ile Gly Lys Lys Leu Leu Tyr Leu Glu		
770	775	780
Asp Gln Leu His Thr Ala Ile His Ser His Asp Glu Asp Leu Ile Gln		
785	790	795
Ser Leu Arg Arg Glu Leu Gln Met Val Lys Glu Thr Leu Gln Ala Met		
805	810	815
Ile Leu Gln Leu Gln Pro Ala Lys Glu Ala Gly Glu Arg Glu Ala Ala		
820	825	830
Ala Ser Cys Met Thr Ala Gly Val His Glu Ala Gln Ala		
835	840	845

<210> 3781

<211> 332

<212> PRT

<213> Homo sapiens

<400> 3781

Gly Arg Arg Arg Ala Gly Pro Ala His Ser Ala Arg Met Tyr Asn Met	
1 5 10 15	
Met Glu Thr Glu Leu Lys Pro Pro Gly Pro Gln Gln Thr Ser Gly Gly	
20 25 30	
Gly Gly Gly Asn Ser Thr Ala Ala Ala Ala Gly Gly Asn Gln Lys Asn	
35 40 45	
Ser Pro Asp Arg Val Lys Arg Pro Met Asn Ala Phe Met Val Trp Ser	
50 55 60	
Arg Gly Gln Arg Arg Lys Met Ala Gln Glu Asn Pro Lys Met His Asn	
65 70 75 80	
Ser Glu Ile Ser Lys Arg Leu Gly Ala Glu Trp Lys Leu Leu Ser Glu	
85 90 95	
Thr Glu Lys Arg Pro Phe Ile Asp Glu Ala Lys Arg Leu Arg Ala Leu	
100 105 110	
His Met Lys Glu His Pro Asp Tyr Lys Tyr Arg Pro Arg Arg Lys Thr	
115 120 125	
Lys Thr Leu Met Lys Lys Asp Lys Tyr Thr Leu Pro Gly Gly Leu Leu	
130 135 140	
Ala Pro Gly Gly Asn Ser Met Ala Ser Gly Val Gly Val Gly Ala Gly	
145 150 155 160	
Leu Gly Ala Gly Val Asn Gln Arg Met Asp Ser Tyr Ala His Met Asn	
165 170 175	
Gly Trp Ser Asn Gly Ser Tyr Ser Met Met Gln Asp Gln Leu Gly Tyr	

180	185	190
Pro Gln His Pro Gly Leu Asn Ala His Gly Ala Ala Gln Met Gln Pro		
195	200	205
Met His Arg Tyr Asp Val Ser Ala Leu Gln Tyr Asn Ser Met Thr Ser		
210	215	220
Ser Gln Thr Tyr Met Asn Gly Ser Arg Pro Thr Tyr Ser Met Ser Tyr		
225	230	235
Ser Gln Gln Gly Thr Pro Gly Met Ala Pro Gly Ser Met Gly Ser Val		
245	250	255
Val Lys Ser Glu Ala Ser Ser Ser Pro Pro Val Val Thr Ser Ser Ser		
260	265	270
His Ser Arg Ala Pro Cys Gln Ala Gly Asp Leu Arg Asp Met Ile Ser		
275	280	285
Met Tyr Leu Pro Gly Ala Glu Val Pro Glu Pro Ala Ala Pro Ser Arg		
290	295	300
Leu His Met Ser Gln His Tyr Gln Ser Gly Pro Val Pro Gly Thr Ala		
305	310	315
Ile Asn Gly Thr Leu Pro Leu Ser His Met		
325	330	

<210> 3782
 <211> 883
 <212> PRT
 <213> Homo sapiens

<400> 3782

Phe Arg Val Pro Asp Ser Cys Pro Val Val Leu His Ser Phe Thr Gln	
1	5
Leu Asp Pro Asp Leu Pro Arg Pro Glu Ser Ser Thr Gln Glu Ile Gly	
20	25
Glu Glu Leu Ile Asn Gly Val Ile Tyr Ser Ile Ser Leu Arg Lys Val	
35	40
Gln Leu His His Gly Gly Asn Lys Gly Gln Arg Trp Leu Gly Tyr Glu	
50	55
Asn Glu Ser Ala Leu Asn Leu Tyr Glu Thr Cys Lys Val Arg Thr Val	
65	70
Lys Ala Gly Thr Leu Glu Lys Leu Val Glu His Leu Val Pro Ala Phe	
85	90
Gln Gly Ser Asp Leu Ser Tyr Val Thr Ile Phe Leu Cys Thr Tyr Arg	
100	105
Ala Phe Thr Thr Gln Gln Val Leu Asp Leu Leu Phe Lys Arg Tyr	
115	120
Gly Arg Cys Asp Ala Leu Thr Ala Ser Ser Arg Tyr Gly Cys Ile Leu	
130	135
Pro Tyr Ser Asp Glu Asp Gly Gly Pro Gln Asp Gln Leu Lys Asn Ala	
145	150
Ile Ser Ser Ile Leu Gly Thr Trp Leu Asp Gln Tyr Ser Glu Asp Phe	
165	170
Cys Gln Pro Pro Asp Phe Pro Cys Leu Lys Gln Leu Val Ala Tyr Val	
180	185
Gln Leu Asn Met Pro Gly Ser Asp Leu Glu Arg Arg Ala His Leu Leu	
195	200
Leu Ala Gln Leu Glu His Ser Glu Pro Ile Glu Ala Glu Pro Glu Gly	
210	215
Glu Glu Asp Trp Ala Leu Ser Pro Val Pro Ala Leu Lys Pro Thr Pro	
225	230
Glu Leu Glu Leu Ala Leu Thr Pro Ala Arg Ala Pro Ser Pro Val Pro	
245	250
Ala Pro Ala Pro Glu Pro Glu Pro Ala Pro Thr Pro Ala Pro Gly Ser	
260	265
Glu Leu Glu Val Ala Pro Ala Pro Ala Pro Glu Leu Gln Gln Ala Pro	
270	

275	280	285
Glu Pro Ala Val Gly Leu	Glu Ser Ala Pro Ala Pro	Ala Leu Glu Leu
290	295	300
Glu Pro Ala Pro Glu Gln Asp	Pro Ala Pro Ser Gln Thr	Leu Glu Leu
305	310	315
Glu Pro Ala Pro Ala Pro Val	Pro Ser Leu Gln Pro Ser Trp	Pro Ser
325	330	335
Pro Val Val Ala Glu Asn Gly	Leu Ser Glu Glu Lys Pro His	Leu Leu
340	345	350
Val Phe Pro Pro Asp Leu Val	Ala Glu Gln Phe Thr Leu Met	Asp Ala
355	360	365
Glu Leu Phe Lys Lys Val Val	Pro Tyr His Cys Leu Gly Ser	Ile Trp
370	375	380
Ser Gln Arg Asp Lys Lys Gly	Lys Glu His Leu Ala Pro Thr	Ile Arg
385	390	395
Ala Thr Val Thr Gln Phe Asn	Ser Val Ala Asn Cys Val Ile	Thr Thr
405	410	415
Cys Leu Gly Asn Arg Ser Thr	Lys Ala Pro Asp Arg Ala Arg	Val Val
420	425	430
Glu His Trp Ile Glu Val Ala	Arg Glu Cys Arg Ile Leu Lys	Asn Phe
435	440	445
Ser Ser Leu Tyr Ala Ile Leu	Ser Ala Leu Gln Ser Asn Ser	Ile His
450	455	460
Arg Leu Lys Lys Thr Trp Glu	Asp Val Ser Arg Asp Ser Phe	Arg Ile
465	470	475
Phe Gln Lys Leu Ser Glu Ile	Phe Ser Asp Glu Asn Asn Tyr	Ser Leu
485	490	495
Ser Arg Glu Leu Leu Ile Lys	Glu Gly Thr Ser Lys Phe Ala	Thr Leu
500	505	510
Glu Met Asn Pro Lys Arg Ala	Gln Lys Arg Pro Lys Glu Thr	Gly Ile
515	520	525
Ile Gln Gly Thr Val Pro Tyr	Leu Gly Thr Phe Leu Thr Asp	Leu Val
530	535	540
Met Leu Asp Thr Ala Met Lys	Asp Tyr Leu Tyr Gly Arg Leu	Ile Asn
545	550	555
Phe Glu Lys Arg Arg Lys Glu	Phe Glu Val Ile Ala Gln Ile	Lys Leu
565	570	575
Leu Gln Ser Ala Cys Asn Asn	Tyr Ser Ile Ala Pro Asp Glu	Gln Phe
580	585	590
Gly Ala Trp Phe Arg Ala Val	Glu Arg Leu Ser Glu Thr Glu	Ser Tyr
595	600	605
Asn Leu Ser Cys Glu Leu Glu	Pro Pro Ser Glu Ser Ala Ser	Asn Thr
610	615	620
Leu Arg Thr Lys Lys Asn Thr	Ala Ile Val Lys Arg Trp Ser	Asp Arg
625	630	635
Gln Ala Pro Ser Thr Glu Leu	Ser Thr Ser Gly Ser Ser His	Ser Lys
645	650	655
Ser Cys Asp Gln Leu Arg Cys	Gly Pro Tyr Leu Ser Ser Gly	Asp Ile
660	665	670
Ala Asp Ala Leu Ser Val His	Ser Ala Gly Ser Ser Ser Ser	Asp Val
675	680	685
Glu Glu Ile Asn Ile Ser Phe	Val Pro Glu Ser Pro Asp Gly	Gln Glu
690	695	700
Lys Lys Phe Trp Glu Ser Ala	Ser Gln Ser Ser Pro Glu Thr	Ser Gly
705	710	715
Ile Ser Ser Ala Ser Ser Ser	Thr Ser Ser Ser Ala Ser Thr	Thr
725	730	735
Pro Val Ala Ala Thr Arg Thr	His Lys Arg Ser Val Ser Gly	Leu Cys
740	745	750
Asn Ser Ser Ser Ala Leu Pro	Leu Tyr Asn Gln Gln Val Gly	Asp Cys
755	760	765
Cys Ile Ile Arg Val Ser Leu	Asp Val Asp Asn Gly Asn Met	Tyr Lys
770	775	780
Ser Ile Leu Val Thr Ser Gln	Asp Lys Ala Pro Ala Val Ile	Arg Lys

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785              790              795              800
Ala Met Asp Lys His Asn Leu Glu Glu Glu Pro Glu Asp Tyr Glu
      805              810              815
Leu Leu Gln Ile Leu Ser Asp Asp Arg Lys Leu Lys Ile Pro Glu Asn
      820              825              830
Ala Asn Val Phe Tyr Ala Met Asn Ser Thr Ala Asn Tyr Asp Phe Val
      835              840              845
Leu Lys Lys Arg Thr Phe Thr Lys Gly Val Lys Val Lys His Gly Ala
      850              855              860
Ser Ser Thr Leu Pro Arg Met Lys Gln Lys Gly Leu Lys Ile Ala Lys
865              870              875              880
Gly Ile Phe
      883

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<210> 3783
<211> 288
<212> PRT
<213> Homo sapiens

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<400> 3783
Arg Ser Gly Gln Gly Lys Val Tyr Gly Leu Ile Gly Arg Arg Arg Phe
 1              5              10              15
Gln Gln Met Asp Val Leu Glu Gly Leu Asn Leu Leu Ile Thr Ile Ser
      20              25              30
Gly Lys Arg Asn Lys Leu Arg Val Tyr Tyr Leu Ser Trp Leu Arg Asn
      35              40              45
Lys Ile Leu His Asn Asp Pro Glu Val Glu Lys Lys Gln Gly Trp Thr
      50              55              60
Thr Val Gly Asp Met Glu Gly Cys Gly His Tyr Arg Val Val Lys Tyr
      65              70              75              80
Glu Arg Ile Lys Phe Leu Val Ile Ala Leu Lys Ser Ser Val Glu Val
      85              90              95
Tyr Ala Trp Ala Pro Lys Pro Tyr His Lys Phe Met Ala Phe Lys Ser
      100              105              110
Phe Ala Asp Leu Pro His Arg Pro Leu Leu Val Asp Leu Thr Val Glu
      115              120              125
Glu Gly Gln Arg Leu Lys Val Ile Tyr Gly Ser Ser Ala Gly Phe His
      130              135              140
Ala Val Asp Val Asp Ser Gly Asn Ser Tyr Asp Ile Tyr Ile Pro Val
      145              150              155              160
His Ile Gln Ser Gln Ile Thr Pro His Ala Ile Ile Phe Leu Pro Asn
      165              170              175
Thr Asp Gly Met Glu Met Leu Leu Cys Tyr Glu Asp Glu Gly Val Tyr
      180              185              190
Val Asn Thr Tyr Gly Arg Ile Ile Lys Asp Val Val Leu Gln Trp Gly
      195              200              205
Glu Met Pro Thr Ser Val Ala Tyr Ile Cys Ser Asn Gln Ile Met Gly
      210              215              220
Trp Gly Glu Lys Ala Ile Glu Ile Arg Ser Val Glu Thr Gly His Leu
      225              230              235              240
Asp Gly Val Phe Met His Lys Arg Ala Gln Arg Leu Lys Phe Leu Cys
      245              250              255
Glu Arg Asn Asp Lys Val Phe Phe Ala Ser Val Arg Ser Gly Gly Ser
      260              265              270
Ser Gln Val Tyr Phe Met Thr Leu Asn Arg Asn Cys Ile Met Asn Trp
      275              280              285              288

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<210> 3784
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 3784
 Leu Ser Pro Arg Gln Val Asp Gly Leu Ala Gly Leu Gln Lys Gly Leu
 1 5 10 15
 Ser Leu Ser Leu Leu Tyr Gln Phe Leu Met Asn Gly Ile Arg Leu Gly
 20 25 30
 Thr Tyr Gly Leu Ala Glu Ala Gly Gly Tyr Leu His Thr Ala Glu Gly
 35 40 45
 Thr His Ser Pro Ala Arg Ser Ala Ala Ala Gly Ala Met Ala Gly Val
 50 55 60
 Met Gly Ala Tyr Leu Gly Ser Pro Ile Tyr Met Val Lys Thr His Leu
 65 70 75 80
 Gln Ala Gln Ala Ala Ser Glu Ile Ala Val Gly His Gln Tyr Lys His
 85 90 95
 Gln Gly Met Phe Gln Ala Leu Thr Glu Ile Gly Gln Lys His Gly Leu
 100 105 110
 Val Gly Leu Trp Arg Gly Ala Leu Gly Gly Leu Pro Arg Val Ile Val
 115 120 125
 Gly Ser Ser Thr Gln Leu Cys Thr Phe Ser Ser Thr Lys Asp Leu Leu
 130 135 140
 Ser Gln Trp Glu Ile Phe Pro Pro Gln Ser Trp Lys Leu Ala Leu Val
 145 150 155 160
 Ala Ala Met Met Ser Gly Ile Ala Val Val Leu Ala Met Ala Pro Phe
 165 170 175
 Asp Val Ala Cys Thr Arg Leu Tyr Asn Gln Pro His Arg Cys Thr Gly
 180 185 190
 Gln Gly Pro Leu Tyr Arg Gly Ile Leu Asp Ala Leu Leu Gln Thr Ala
 195 200 205
 Arg Thr Glu Gly Ile Phe Gly Met Tyr Lys Gly Ile Gly Ala Ser Tyr
 210 215 220
 Phe Arg Leu Gly Pro His Thr Ile Leu Ser Leu Phe Phe Trp Asp Gln
 225 230 235 240
 Leu Arg Ser Leu Tyr Tyr Thr Asp Thr Lys
 245 250

<210> 3785
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 3785
 Arg Arg Arg Gly Arg His Ser Leu Cys Gly Gly Lys Met Leu Ala Tyr
 1 5 10 15
 Cys Val Gln Asp Ala Thr Val Val Asp Val Glu Lys Arg Arg Asn Pro
 20 25 30
 Ser Lys His Tyr Val Tyr Ile Ile Asn Val Thr Trp Ser Asp Ser Thr
 35 40 45
 Ser Gln Thr Ile Tyr Arg Arg Tyr Ser Lys Phe Phe Asp Leu Gln Met
 50 55 60
 Gln Leu Leu Asp Lys Phe Pro Ile Glu Ser Gly Gln Lys Asp Pro Lys
 65 70 75 80
 Gln Arg Ile Ile Pro Phe Leu Pro Gly Lys Ile Leu Phe Arg Arg Ser
 85 90 95
 His Ile Arg Asp Val Ala Val Lys Arg Leu Lys Pro Ile Asp Glu Tyr
 100 105 110
 Cys Arg Ala Leu Val Arg Leu Pro Pro His Ile Ser Gln Cys Asp Glu

115	120	125
Val Phe Arg Phe Phe Glu Ala Arg Pro Glu Asp Val Asn Pro Pro Lys		
130	135	140
Glu Gln Gly Pro Ser Pro Pro Asp Ala Val Leu Pro Tyr Gly Val Asn		
145	150	155
Lys Gly Lys Gln Glu Leu Lys Ala Gly Pro Asn Trp Pro Gly Arg Thr		
165	170	175
His His Val Val Asn Cys Val Thr Gln Lys Cys Leu Phe Val Phe His		
180	185	190
Phe Lys Phe Ser Ser Ser Gly Asn Lys Glu Ser Lys Ser Leu		
195	200	205 206

<210> 3786
 <211> 720
 <212> PRT
 <213> Homo sapiens

<400> 3786

Glu Phe Val Gly Arg Ala Ala Ser Thr Thr Val Val Thr Arg Ile Ala	
1	5 10 15
Trp Arg Met Ala Asp Ala Gly Ile Arg Arg Val Val Pro Ser Asp Leu	
20	25 30
Tyr Pro Leu Val Leu Gly Phe Leu Arg Asp Asn Gln Leu Ser Glu Val	
35	40 45
Ala Asn Lys Phe Ala Lys Ala Thr Gly Ala Thr Gln Gln Asp Ala Asn	
50	55 60
Ala Ser Ser Leu Leu Asp Ile Tyr Ser Phe Trp Leu Asn Arg Ser Ala	
65	70 75 80
Lys Val Pro Glu Arg Lys Leu Gln Ala Asn Gly Pro Val Ala Lys Lys	
85	90 95
Ala Lys Lys Lys Ala Ser Ser Ser Asp Ser Glu Asp Ser Ser Glu Glu	
100	105 110
Glu Glu Glu Val Gln Gly Pro Pro Ala Lys Lys Ala Ala Val Pro Ala	
115	120 125
Lys Arg Val Gly Leu Pro Pro Gly Lys Ala Ala Ala Lys Ala Ser Glu	
130	135 140
Ser Ser Ser Ser Glu Glu Ser Ser Asp Asp Asp Asp Glu Glu Asp Gln	
145	150 155 160
Lys Lys Gln Pro Val Gln Lys Gly Val Lys Pro Gln Ala Lys Ala Gly	
165	170 175
Gln Ala Pro Pro Lys Lys Ala Lys Ser Ser Asp Ser Asp Ser Asp Ser	
180	185 190
Ser Ser Glu Asp Glu Pro Pro Lys Asn Gln Lys Pro Lys Ile Thr Pro	
195	200 205
Val Thr Val Lys Ala Gln Thr Lys Ala Pro Pro Lys Pro Ala Arg Ala	
210	215 220
Ala Pro Lys Ile Ala Asn Gly Lys Ala Ala Ser Ser Ser Ser Ser	
225	230 235 240
Ser Ser Ser Ser Ser Ser Asp Asp Ser Glu Glu Lys Ala Ala Ala	
245	250 255
Thr Pro Lys Lys Thr Val Pro Lys Lys Gln Val Val Ala Lys Ala Pro	
260	265 270
Val Lys Ala Ala Thr Thr Pro Thr Arg Lys Ser Ser Ser Ser Glu Asp	
275	280 285
Ser Ser Ser Asp Glu Glu Glu Glu Gln Lys Lys Pro Met Lys Asn Lys	
290	295 300
Pro Gly Pro Tyr Ser Ser Val Pro Pro Pro Ser Ala Pro Pro Pro Lys	
305	310 315 320
Lys Ser Leu Gly Thr Gln Pro Pro Lys Lys Ala Val Glu Lys Gln Gln	
325	330 335
Pro Val Glu Ser Ser Glu Asp Ser Ser Asp Glu Ser Asp Ser Ser Ser	

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<210> 3787
<211> 1697
<212> PRT
<213> Homo sapiens
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5546

50	55	60			
Val Pro Glu Met Pro Thr Leu Pro Ala Glu Gly Ser Asp Gly Ser Pro					
65	70	75	80		
Pro Ala Thr Arg Asp Leu Leu Leu Ser Ser Lys Val Pro Asn Leu Leu					
85	90	95			
Ser Thr Ser Trp Thr Phe Pro Arg Trp Lys Lys Asp Ser Val Thr Ala					
100	105	110			
Ile Leu Gly Lys Asn Glu Glu Ala Asn Val Thr Ile Pro Leu Gln Ala					
115	120	125			
Phe Pro Arg Lys Glu Val Leu Ser Leu His Thr Val Asn Gly Phe Val					
130	135	140			
Ser Asp Phe Ser Thr Gly Ser Val Ser Ser Pro Ile Ile Thr Ala Pro					
145	150	155	160		
Arg Thr Asn Pro Leu Pro Ser Gly Pro Pro Leu Pro Ser Ile Leu Ser					
165	170	175			
Ile Gln Ala Thr Gln Thr Val Phe Pro Ser Leu Leu Ala Phe Ser Ser					
180	185	190			
Thr Lys Pro Glu Val Tyr Ala Ala Ala Val Asp His Ser Gly Leu Pro					
195	200	205			
Ala Ser Ala Pro Lys Gln Val Arg Ala Ser Pro Ser Ser Met Asp Val					
210	215	220			
Tyr Asp Ser Leu Thr Ile Gly Asp Met Lys Lys Pro Ala Thr Thr Asp					
225	230	235	240		
Val Phe Trp Ser Ser Leu Ser Ala Glu Thr Gly Ser Leu Ser Thr Glu					
245	250	255			
Ser Ile Ile Ser Gly Leu Gln Gln Gln Thr Asn Tyr Asp Leu Asn Gly					
260	265	270			
His Thr Ile Ser Thr Thr Ser Trp Glu Thr His Leu Ala Pro Thr Ala					
275	280	285			
Pro Pro Asn Gly Leu Thr Ser Ala Ala Asp Ala Ile Lys Ser Gln Asp					
290	295	300			
Phe Lys Asp Thr Ala Gly His Ser Val Thr Ala Glu Gly Phe Ser Ile					
305	310	315	320		
Gln Asp Leu Val Leu Gly Thr Ser Ile Glu Gln Pro Val Gln Gln Ser					
325	330	335			
Asp Met Thr Met Val Gly Ser His Ile Asp Leu Trp Pro Thr Ser Asn					
340	345	350			
Asn Asn His Ser Arg Asp Phe Gln Thr Ala Glu Val Ala Tyr Tyr Ser					
355	360	365			
Pro Thr Thr Arg His Ser Val Ser His Pro Gln Leu Gln Leu Pro Asn					
370	375	380			
Gln Pro Ala His Pro Leu Leu Thr Ser Pro Gly Pro Thr Ser Thr					
385	390	395	400		
Gly Ser Leu Gln Glu Met Leu Ser Asp Gly Thr Asp Thr Gly Ser Glu					
405	410	415			
Ile Ser Ser Asp Ile Asn Ser Ser Pro Glu Arg Asn Ala Ser Thr Pro					
420	425	430			
Phe Gln Asn Ile Leu Gly Tyr His Ser Ala Ala Glu Ser Ser Ile Ser					
435	440	445			
Thr Ser Val Phe Pro Arg Thr Ser Ser Arg Val Leu Arg Ala Ser Gln					
450	455	460			
His Pro Lys Lys Trp Thr Ala Asp Thr Val Ser Ser Lys Val Gln Pro					
465	470	475	480		
Thr Ala Ala Ala Ala Val Thr Leu Phe Leu Arg Lys Ser Ser Pro Pro					
485	490	495			
Ala Leu Ser Ala Ala Leu Val Ala Lys Gly Thr Ser Ser Ser Pro Leu					
500	505	510			
Ala Val Ala Ser Gly Pro Ala Lys Ser Ser Ser Met Thr Thr Leu Ala					
515	520	525			
Lys Asn Val Thr Asn Lys Ala Ala Ser Gly Pro Lys Arg Thr Pro Gly					
530	535	540			
Ala Val His Thr Ala Phe Pro Phe Thr Pro Thr Tyr Met Tyr Ala Arg					
545	550	555	560		
Thr Gly His Thr Thr Ser Thr His Thr Ala Ile Ala Arg Lys His Gly					

5548

1075	1080	1085
Glu Val Ile Pro Val Thr Gln Glu Thr Val Val Leu Pro Leu Pro Ile		
1090	1095	1100
Arg Asp Ala Pro Gln Glu Arg Asp Val Ala Gln Asp Gly Ser Thr Ile		
1105	1110	1115
Lys Thr Ala Lys Ser Thr Glu Thr Arg Lys Ser Arg Ser Pro Ser Glu		
1125	1130	1135
Asn Gly Ser Val Ile Ser Asn Glu Ser Gly Lys Pro Ser Ser Gly Arg		
1140	1145	1150
Arg Ser Pro Gln Asn Val Met Ala Gln Gln Lys Val Thr Lys Glu Glu		
1155	1160	1165
Ala Arg Lys Arg Asn Val Pro Ala Ser Asp Glu Glu Glu Gly Ala Val		
1170	1175	1180
Leu Phe Asp Asn Ser Ser Lys Val Ala Ala Glu Pro Phe Asp Thr Ser		
1185	1190	1195
Ser Gly Ser Val Gln Leu Ile Ala Ile Lys Pro Thr Ala Leu Pro Met		
1205	1210	1215
Val Pro Pro Thr Ser Asp Arg Ser Gln Glu Ser Ser Ala Val Leu Asn		
1220	1225	1230
Gly Glu Val Asn Lys Ala Leu Lys Gln Lys Ser Asp Ile Glu His Tyr		
1235	1240	1245
Arg Asn Lys Leu Arg Leu Lys Ala Lys Arg Lys Gly Tyr Tyr Asp Phe		
1250	1255	1260
Pro Ala Val Glu Thr Ser Lys Gly Leu Thr Glu Arg Lys Lys Met Tyr		
1265	1270	1275
Glu Lys Ala Pro Lys Glu Met Glu His Val Leu Asp Pro Asp Ser Glu		
1285	1290	1295
Leu Cys Ala Pro Phe Thr Glu Ser Lys Asn Arg Gln Gln Met Lys Asn		
1300	1305	1310
Ser Val Tyr Arg Ser Arg Gln Ser Leu Asn Ser Pro Ser Pro Gly Glu		
1315	1320	1325
Thr Glu Met Asp Leu Leu Val Thr Arg Glu Arg Pro Arg Arg Gly Ile		
1330	1335	1340
Arg Asn Ser Gly Tyr Asp Thr Glu Pro Glu Ile Ile Glu Glu Thr Asn		
1345	1350	1355
Ile Asp Arg Val Pro Glu Pro Arg Gly Tyr Ser Arg Ser Arg Gln Val		
1365	1370	1375
Lys Gly His Ser Glu Thr Ser Thr Leu Ser Ser Gln Pro Ser Ile Asp		
1380	1385	1390
Glu Val Arg Gln Gln Met His Met Leu Leu Glu Glu Ala Phe Ser Leu		
1395	1400	1405
Ala Ser Ala Gly His Ala Gly Gln Ser Arg His Gln Glu Ala Tyr Gly		
1410	1415	1420
Ser Ala Gln His Leu Pro Tyr Ser Glu Val Val Thr Ser Ala Pro Gly		
1425	1430	1435
Thr Met Thr Arg Pro Arg Ala Gly Val Gln Trp Val Pro Thr Tyr Arg		
1445	1450	1455
Pro Glu Met Tyr Gln Tyr Ser Leu Pro Arg Pro Ala Tyr Arg Phe Ser		
1460	1465	1470
Gln Leu Pro Glu Met Val Met Gly Ser Pro Pro Pro Pro Val Pro Pro		
1475	1480	1485
Arg Thr Gly Pro Val Ala Val Ala Ser Leu Arg Arg Ser Thr Ser Asp		
1490	1495	1500
Ile Gly Ser Lys Thr Arg Met Ala Glu Ser Thr Gly Pro Glu Pro Ala		
1505	1510	1515
Gln Leu His Asp Ser Ala Ser Phe Thr Gln Met Ser Arg Gly Pro Val		
1525	1530	1535
Ser Val Thr Gln Leu Asp Gln Ser Ala Leu Asn Tyr Ser Gly Asn Thr		
1540	1545	1550
Val Pro Ala Val Phe Ala Ile Pro Ala Ala Asn Arg Pro Gly Phe Thr		
1555	1560	1565
Gly Tyr Phe Ile Pro Thr Pro Pro Ser Ser Tyr Arg Asn Gln Ala Trp		
1570	1575	1580
Met Ser Tyr Ala Gly Glu Asn Glu Leu Pro Ser Gln Trp Ala Asp Ser		

1585 1590 1595 1600
 Val Pro Leu Pro Gly Tyr Ile Glu Ala Tyr Pro Arg Ser Arg Tyr Pro
 1605 1610 1615
 Gln Ser Ser Pro Ser Arg Leu Pro Arg Gln Tyr Ser Gln Pro Ala Asn
 1620 1625 1630
 Leu His Pro Ser Leu Glu Gln Ala Pro Ala Pro Ser Thr Ala Ala Ser
 1635 1640 1645
 Gln Gln Ser Leu Ala Glu Asn Asp Pro Ser Asp Ala Pro Leu Thr Asn
 1650 1655 1660
 Ile Ser Thr Ala Ala Leu Val Lys Ala Ile Arg Glu Glu Val Ala Lys
 1665 1670 1675 1680
 Leu Ala Lys Lys Gln Thr Asp Met Phe Glu Phe Gln Val
 1685 1690 1693

<210> 3788
 <211> 582
 <212> PRT
 <213> Homo sapiens

<400> 3788
 Met Lys Gly Leu Tyr Thr Asp Ala Glu Met Lys Ser Asp Asn Val Lys
 1 5 10 15
 Asp Lys Asp Ala Lys Ile Ser Phe Leu Gln Lys Ala Ile Asp Val Val
 20 25 30
 Val Met Val Ser Gly Glu Pro Leu Leu Ala Lys Pro Ala Arg Ile Val
 35 40 45
 Ala Gly His Glu Pro Glu Arg Thr Asn Glu Leu Leu Gln Ile Ile Gly
 50 55 60
 Lys Cys Cys Leu Asn Lys Leu Ser Ser Asp Asp Ala Val Arg Arg Val
 65 70 75 80
 Leu Ala Gly Glu Lys Gly Glu Val Lys Gly Arg Ala Ser Leu Thr Ser
 85 90 95
 Arg Ser Gln Glu Leu Asp Asn Lys Asn Val Arg Glu Glu Glu Ser Arg
 100 105 110
 Val His Lys Asn Thr Glu Asp Arg Gly Asp Ala Glu Ile Lys Glu Arg
 115 120 125
 Ser Thr Ser Arg Asp Arg Lys Gln Lys Glu Glu Leu Lys Glu Asp Arg
 130 135 140
 Met Pro Arg Glu Lys Asp Lys Asp Lys Glu Lys Ala Lys Glu Asn Gly
 145 150 155 160
 Gly Asn Arg His Arg Glu Gly Glu Arg Glu Arg Ala Lys Ala Arg Ala
 165 170 175
 Arg Pro Asp Asn Glu Arg Gln Lys Asp Arg Gly Asn Arg Glu Arg Asp
 180 185 190
 Arg Asp Ser Glu Arg Lys Lys Glu Thr Glu Arg Lys Ser Glu Gly Gly
 195 200 205
 Lys Glu Lys Glu Arg Leu Arg Asp Arg Asp Arg Glu Arg Asp Arg Asp
 210 215 220
 Lys Gly Lys Asp Arg Asp Arg Arg Val Lys Asn Gly Glu His Ser
 225 230 235 240
 Trp Asp Leu Asp Arg Glu Asn Asn Arg Glu His Asp Lys Pro Glu Lys
 245 250 255
 Lys Ser Ala Ser Ser Gly Glu Met Ser Lys Lys Leu Ser Asp Gly Thr
 260 265 270
 Phe Lys Asp Ser Lys Ala Glu Thr Glu Thr Glu Ile Ser Thr Arg Ala
 275 280 285
 Ser Lys Ser Leu Thr Thr Lys Thr Ser Lys Arg Arg Ser Lys Asn Ser
 290 295 300
 Val Glu Gly Asp Ser Thr Ser Asp Ala Glu Gly Asp Ala Gly Pro Ala
 305 310 315 320
 Gly Gln Asp Lys Ser Glu Val Pro Glu Thr Pro Glu Ile Pro Asn Glu

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          325          330          335
Leu Ser Ser Asn Ile Arg Arg Ile Pro Arg Pro Gly Ser Ala Arg Pro
          340          345          350
Ala Pro Pro Arg Val Lys Arg Gln Asp Ser Met Glu Ala Leu Gln Met
          355          360          365
Asp Arg Ser Gly Ser Gly Lys Thr Val Ser Asn Val Ile Thr Glu Ser
          370          375          380
His Asn Ser Asp Asn Glu Asp Asp Gln Phe Val Val Glu Ala Ala
          385          390          395          400
Pro Gln Leu Ser Glu Met Ser Glu Ile Glu Met Val Thr Ala Val Glu
          405          410          415
Leu Glu Glu Glu Glu Lys His Gly Gly Leu Val Lys Lys Ile Leu Glu
          420          425          430
Thr Lys Lys Asp Tyr Glu Lys Leu Gln Gln Ser Pro Lys Pro Gly Glu
          435          440          445
Lys Glu Arg Ser Leu Phe Glu Ser Ala Trp Lys Lys Glu Lys Asp Ile
          450          455          460
Val Ser Lys Glu Ile Glu Lys Leu Arg Thr Ser Ile Gln Thr Leu Cys
          465          470          475          480
Lys Ser Ala Leu Pro Leu Gly Lys Ile Met Asp Tyr Ile Gln Glu Asp
          485          490          495
Val Asp Ala Met Gln Asn Glu Leu Gln Met Tyr His Ser Glu Asn Arg
          500          505          510
Gln His Ala Glu Ala Leu Gln Gln Glu Gln Arg Ile Thr Asp Cys Ala
          515          520          525
Val Glu Pro Leu Lys Ala Glu Leu Ala Glu Leu Glu Gln Leu Ile Lys
          530          535          540
Asp Gln Gln Asp Lys Ile Cys Ala Val Lys Ala Asn Ile Leu Lys Asn
          545          550          555          560
Glu Glu Lys Ile Gln Lys Met Val Tyr Ser Ile Asn Leu Thr Ser Arg
          565          570          575
Arg
577

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<210> 3789
<211> 1458
<212> PRT
<213> Homo sapiens

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<400> 3789
Met Arg Thr Leu Gly Thr Cys Leu Ala Thr Leu Ala Gly Leu Leu Leu
  1          5          10          15
Thr Ala Ala Gly Glu Thr Phe Ser Gly Gly Cys Leu Phe Asp Glu Pro
          20          25          30
Tyr Ser Thr Cys Gly Tyr Ser Gln Ser Glu Gly Asp Asp Phe Asn Trp
          35          40          45
Glu Gln Val Asn Thr Leu Thr Lys Pro Thr Ser Asp Pro Trp Met Pro
          50          55          60
Ser Gly Ser Phe Met Leu Val Asn Ala Ser Gly Arg Pro Glu Gly Gln
          65          70          75          80
Arg Ala His Leu Leu Leu Pro Gln Leu Lys Glu Asn Asp Thr His Cys
          85          90          95
Ile Asp Phe His Tyr Phe Val Ser Ser Lys Ser Asn Ser Pro Pro Gly
          100          105          110
Leu Leu Asn Val Tyr Val Lys Val Asn Asn Gly Pro Leu Gly Asn Pro
          115          120          125
Ile Trp Asn Ile Ser Gly Asp Pro Thr Arg Thr Trp Asn Arg Ala Glu
          130          135          140
Leu Ala Ile Ser Thr Phe Trp Pro Asn Phe Tyr Gln Val Ile Phe Glu
          145          150          155          160
Val Ile Thr Ser Gly His Gln Gly Tyr Leu Ala Ile Asp Glu Val Lys

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				165					170					175	
Val	Leu	Gly	His	Pro	Cys	Thr	Arg	Thr	Pro	His	Phe	Leu	Arg	Ile	Gln
			180						185				190		
Asn	Val	Glu	Val	Asn	Ala	Gly	Gln	Phe	Ala	Thr	Phe	Gln	Cys	Ser	Ala
		195					200					205			
Ile	Gly	Arg	Thr	Val	Ala	Gly	Asp	Arg	Leu	Trp	Leu	Gln	Gly	Ile	Asp
	210					215					220				
Val	Arg	Asp	Ala	Pro	Leu	Lys	Glu	Ile	Lys	Val	Thr	Ser	Ser	Arg	Arg
225					230					235				240	
Phe	Ile	Ala	Ser	Phe	Asn	Val	Val	Asn	Thr	Thr	Lys	Arg	Asp	Ala	Gly
			245						250					255	
Lys	Tyr	Arg	Cys	Met	Ile	Arg	Thr	Glu	Gly	Gly	Val	Gly	Ile	Ser	Asn
		260						265					270		
Tyr	Ala	Glu	Leu	Val	Val	Lys	Glu	Pro	Pro	Val	Pro	Ile	Ala	Pro	Pro
	275						280					285			
Gln	Leu	Ala	Ser	Val	Gly	Ala	Thr	Tyr	Leu	Trp	Ile	Gln	Leu	Asn	Ala
	290						295				300				
Asn	Ser	Ile	Asn	Gly	Asp	Gly	Pro	Ile	Val	Ala	Arg	Glu	Val	Glu	Tyr
305					310					315				320	
Cys	Thr	Ala	Ser	Gly	Ser	Trp	Asn	Asp	Arg	Gln	Pro	Val	Asp	Ser	Thr
			325						330					335	
Ser	Tyr	Lys	Ile	Gly	His	Leu	Asp	Pro	Asp	Thr	Glu	Tyr	Glu	Ile	Ser
		340						345					350		
Val	Leu	Leu	Thr	Arg	Pro	Gly	Glu	Gly	Gly	Thr	Gly	Ser	Pro	Gly	Pro
	355						360					365			
Ala	Leu	Arg	Thr	Arg	Thr	Lys	Cys	Ala	Asp	Pro	Met	Arg	Gly	Pro	Arg
	370					375					380				
Lys	Leu	Glu	Val	Val	Glu	Val	Lys	Ser	Arg	Gln	Ile	Thr	Ile	Arg	Trp
385					390					395				400	
Glu	Pro	Phe	Gly	Tyr	Asn	Val	Thr	Arg	Cys	His	Ser	Tyr	Asn	Leu	Thr
			405						410				415		
Val	His	Tyr	Cys	Tyr	Gln	Val	Gly	Gly	Gln	Glu	Gln	Val	Arg	Glu	Glu
		420					425					430			
Val	Ser	Trp	Asp	Thr	Glu	Asn	Ser	His	Pro	Gln	His	Thr	Ile	Thr	Asn
	435						440					445			
Leu	Ser	Pro	Tyr	Thr	Asn	Val	Ser	Val	Lys	Leu	Ile	Leu	Met	Asn	Pro
	450					455					460				
Glu	Gly	Arg	Lys	Glu	Ser	Gln	Glu	Leu	Ile	Val	Gln	Thr	Asp	Glu	Asp
465					470					475				480	
Leu	Pro	Gly	Ala	Val	Pro	Thr	Glu	Ser	Ile	Gln	Gly	Ser	Thr	Phe	Glu
			485						490					495	
Glu	Lys	Ile	Phe	Leu	Gln	Trp	Arg	Glu	Pro	Thr	Gln	Thr	Tyr	Gly	Val
		500						505					510		
Ile	Thr	Leu	Tyr	Glu	Ile	Thr	Tyr	Lys	Ala	Val	Ser	Ser	Phe	Asp	Pro
	515						520					525			
Glu	Ile	Asp	Leu	Ser	Asn	Gln	Ser	Gly	Arg	Val	Ser	Lys	Leu	Gly	Asn
	530					535					540				
Glu	Thr	His	Phe	Leu	Phe	Phe	Gly	Leu	Tyr	Pro	Gly	Thr	Thr	Tyr	Ser
545					550					555				560	
Phe	Thr	Ile	Arg	Ala	Ser	Thr	Ala	Lys	Gly	Phe	Gly	Pro	Pro	Ala	Thr
			565						570					575	
Asn	Gln	Phe	Thr	Thr	Lys	Ile	Ser	Ala	Pro	Ser	Met	Pro	Ala	Tyr	Glu
		580						585					590		
Leu	Glu	Thr	Pro	Leu	Asn	Gln	Thr	Asp	Asn	Thr	Val	Thr	Val	Met	Leu
	595					600					605				
Lys	Pro	Ala	His	Ser	Arg	Gly	Ala	Pro	Val	Ser	Val	Tyr	Gln	Ile	Val
	610					615					620				
Val	Glu	Glu	Glu	Arg	Pro	Arg	Arg	Thr	Lys	Lys	Thr	Thr	Glu	Ile	Leu
625					630					635				640	
Lys	Cys	Tyr	Pro	Val	Pro	Ile	His	Phe	Gln	Asn	Ala	Ser	Leu	Leu	Asn
			645						650					655	
Ser	Gln	Tyr	Tyr	Phe	Ala	Ala	Glu	Phe	Pro	Ala	Asp	Ser	Leu	Gln	Ala
		660						665					670		
Ala	Gln	Pro	Phe	Thr	Ile	Gly	Asp	Asn	Lys	Thr	Tyr	Asn	Gly	Tyr	Trp

675	680	685
Asn Thr Pro Leu Leu Pro Tyr Lys Ser Tyr Arg Ile Tyr Phe Gln Ala		
690	695	700
Ala Ser Arg Ala Asn Gly Glu Thr Lys Ile Asp Cys Val Gln Val Ala		
705	710	715
Thr Lys Gly Ala Ala Thr Pro Lys Pro Val Pro Glu Pro Glu Lys Gln		
725	730	735
Thr Asp His Thr Val Lys Ile Ala Gly Val Ile Ala Gly Ile Leu Leu		
740	745	750
Phe Val Ile Phe Leu Gly Val Val Leu Val Met Lys Lys Arg Lys		
755	760	765
Leu Ala Lys Lys Arg Lys Glu Thr Met Ser Ser Thr Arg Gln Glu Ile		
770	775	780
Asp Leu Trp Ile Gly Glu Leu Asn Gly Pro Arg Ser Tyr Ala Glu Gln		
785	790	795
Gly Thr Lys Leu Ala Thr Arg Ala Phe Ser Phe Met Asp Thr His Asn		
805	810	815
Leu Asn Gly Arg Ser Val Ser Ser Pro Ser Ser Phe Thr Met Lys Thr		
820	825	830
Asn Thr Leu Ser Thr Ser Val Pro Asn Ser Tyr Tyr Pro Asp Glu Thr		
835	840	845
His Thr Met Ala Ser Asp Thr Ser Ser Leu Val Gln Ser His Thr Tyr		
850	855	860
Lys Lys Arg Glu Pro Ala Asp Val Pro Tyr Gln Thr Gly Gln Leu His		
865	870	875
Pro Ala Ile Arg Val Ala Asp Leu Leu Gln His Ile Thr Gln Met Lys		
885	890	895
Cys Ala Glu Gly Tyr Gly Phe Lys Glu Glu Tyr Glu Ser Phe Phe Glu		
900	905	910
Gly Gln Ser Ala Pro Trp Asp Ser Ala Lys Lys Asp Glu Asn Arg Met		
915	920	925
Lys Asn Arg Tyr Gly Asn Ile Ala Tyr Asp His Ser Arg Val Arg		
930	935	940
Leu Gln Thr Ile Glu Gly Asp Thr Asn Ser Asp Tyr Ile Asn Gly Asn		
945	950	955
Tyr Ile Asp Gly Tyr His Arg Pro Asn His Tyr Ile Ala Thr Gln Gly		
965	970	975
Pro Met Gln Glu Thr Ile Tyr Asp Phe Trp Arg Met Val Trp His Glu		
980	985	990
Asn Thr Ala Ser Ile Ile Met Val Thr Asn Leu Val Glu Val Gly Arg		
995	1000	1005
Val Lys Cys Cys Lys Tyr Trp Pro Asp Asp Thr Glu Ile Tyr Lys Asp		
1010	1015	1020
Ile Lys Val Thr Leu Ile Glu Thr Glu Leu Leu Ala Glu Tyr Val Ile		
1025	1030	1035
Arg Thr Phe Ala Val Glu Lys Arg Gly Val His Glu Ile Arg Glu Ile		
1045	1050	1055
Arg Gln Phe His Phe Thr Gly Trp Pro Asp His Gly Val Pro Tyr His		
1060	1065	1070
Ala Thr Gly Leu Leu Gly Phe Val Arg Gln Val Lys Ser Lys Ser Pro		
1075	1080	1085
Pro Ser Ala Gly Pro Leu Val Val His Cys Ser Ala Gly Ala Gly Arg		
1090	1095	1100
Thr Gly Cys Phe Ile Val Ile Asp Ile Met Leu Asp Met Ala Glu Arg		
1105	1110	1115
Glu Gly Val Val Asp Ile Tyr Asn Cys Val Arg Glu Leu Arg Ser Arg		
1125	1130	1135
Arg Val Asn Met Val Gln Thr Glu Glu Gln Tyr Val Phe Ile His Asp		
1140	1145	1150
Ala Ile Leu Glu Ala Cys Leu Cys Gly Asp Thr Ser Val Pro Ala Ser		
1155	1160	1165
Gln Val Arg Ser Leu Tyr Tyr Asp Met Asn Lys Leu Asp Pro Gln Thr		
1170	1175	1180
Asn Ser Ser Gln Ile Lys Glu Glu Phe Arg Thr Leu Asn Met Val Thr		

1185	1190	1195	1200
Pro Thr Leu Arg Val Glu Asp Cys Ser Ile Ala Leu Leu Pro Arg Asn			
1205	1210	1215	
His Glu Lys Asn Arg Cys Met Asp Ile Leu Pro Pro Asp Arg Cys Leu			
1220	1225	1230	
Pro Phe Leu Ile Thr Ile Asp Gly Glu Ser Ser Asn Tyr Ile Asn Ala			
1235	1240	1245	
Ala Leu Met Asp Ser Tyr Lys Gln Pro Ser Ala Phe Ile Val Thr Gln			
1250	1255	1260	
His Pro Leu Pro Asn Thr Val Lys Asp Phe Trp Arg Leu Val Leu Asp			
1265	1270	1275	1280
Tyr His Cys Thr Ser Val Val Met Leu Asn Asp Val Asp Pro Ala Gln			
1285	1290	1295	
Leu Cys Pro Gln Tyr Trp Pro Glu Asn Gly Val His Arg His Gly Pro			
1300	1305	1310	
Ile Gln Val Glu Phe Val Ser Ala Asp Leu Glu Glu Asp Ile Ile Ser			
1315	1320	1325	
Arg Ile Phe Arg Ile Tyr Asn Ala Ala Arg Pro Gln Asp Gly Tyr Arg			
1330	1335	1340	
Met Val Gln Gln Phe Gln Phe Leu Gly Trp Pro Met Tyr Arg Asp Thr			
1345	1350	1355	1360
Pro Val Ser Lys Arg Ser Phe Leu Lys Leu Ile Arg Gln Val Asp Lys			
1365	1370	1375	
Trp Gln Glu Glu Tyr Asn Gly Gly Glu Gly Arg Thr Val Val His Cys			
1380	1385	1390	
Leu Asn Gly Gly Gly Arg Ser Gly Thr Phe Cys Ala Ile Ser Ile Val			
1395	1400	1405	
Cys Glu Met Leu Arg His Gln Arg Thr Val Asp Val Phe His Ala Val			
1410	1415	1420	
Lys Thr Leu Arg Asn Asn Lys Pro Asn Met Val Asp Leu Leu Asp Gln			
1425	1430	1435	1440
Tyr Lys Phe Cys Tyr Glu Val Ala Leu Glu Tyr Leu Asn Ser Gly			
1445	1450	1455	

<210> 3790
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 3790
 Glu Glu Gln Thr Pro Leu His Ile Ala Ser Arg Leu Gly Lys Thr Glu
 1 5 10 15
 Ile Val Gln Leu Leu Leu Gln His Met Ala His Pro Asp Ala Ala Thr
 20 25 30
 Thr Asn Gly Tyr Thr Pro Leu His Ile Ser Ala Arg Glu Gly Gln Val
 35 40 45
 Asp Val Ala Ser Val Leu Leu Gly Arg Gln Gly Ala Ala His Ser Phe
 50 55 60
 Arg Leu Thr Lys Val Arg Arg Met Thr Ser
 65 70 74

<210> 3791
 <211> 1960
 <212> PRT
 <213> Homo sapiens

<400> 3791
 Leu Pro Pro Val Thr Met Ser Gly Lys Tyr Ile Met Glu Glu His Asp

1	5	10	15
Ser Tyr Ser Asp Gln Val Trp Ser Ile Asp Glu Leu Pro Ser Lys Gln			
	20	25	30
Gly Tyr Tyr Leu Gln Gly Asn Tyr Leu Arg Cys Val Ala Glu Val Gly			
	35	40	45
Ser Phe Glu His Asn Leu Thr Thr Asp Leu Leu Asn His Leu Val Phe			
	50	55	60
Val Gln Lys Val Phe Met Lys Glu Val Asn Glu Val Ile Gln Lys Val			
	65	70	75
Ser Gly Gly Glu Gln Pro Ile Pro Leu Trp Asn Glu His Asp Gly Thr			
	85	90	95
Ala Asp Gly Asp Lys Pro Lys Ile Leu Leu Tyr Ser Leu Asn Leu Gln			
	100	105	110
Phe Lys Gly Ile Gln Val Thr Ala Thr Thr Pro Ser Met Arg Ala Val			
	115	120	125
Arg Phe Glu Thr Gly Leu Ile Glu Leu Glu Leu Ser Asn Arg Leu Gln			
	130	135	140
Thr Lys Ala Ser Pro Gly Ser Ser Ser Tyr Leu Lys Leu Phe Gly Lys			
	145	150	155
Cys Gln Val Asp Leu Asn Leu Ala Leu Gly Gln Ile Val Lys His Gln			
	165	170	175
Val Tyr Glu Glu Ala Gly Ser Asp Phe His Gln Val Ala Tyr Phe Lys			
	180	185	190
Thr Arg Ile Gly Leu Arg Asn Ala Leu Arg Glu Glu Ile Ser Gly Ser			
	195	200	205
Ser Asp Arg Glu Ala Val Leu Ile Thr Leu Asn Arg Pro Ile Val Tyr			
	210	215	220
Ala Gln Pro Val Ala Phe Asp Arg Ala Val Leu Phe Trp Leu Asn Tyr			
	225	230	235
Lys Ala Ala Tyr Asp Asn Trp Asn Glu Gln Arg Met Ala Leu His Lys			
	245	250	255
Asp Ile His Met Ala Thr Lys Glu Val Val Asp Met Leu Pro Gly Ile			
	260	265	270
Gln Gln Thr Ser Ala Gln Ala Phe Gly Thr Pro Phe Leu Gln Leu Thr			
	275	280	285
Val Asn Asp Leu Gly Ile Cys Leu Pro Ile Thr Asn Thr Ala Gln Ser			
	290	295	300
Asn His Thr Gly Asp Leu Asp Thr Gly Ser Ala Leu Val Leu Thr Ile			
	305	310	315
Glu Ser Thr Leu Ile Thr Ala Cys Ser Ser Glu Ser Leu Val Ser Lys			
	325	330	335
Gly His Phe Lys Asn Phe Cys Ile Arg Phe Ala Asp Gly Phe Glu Thr			
	340	345	350
Ser Trp Asp Asp Trp Lys Pro Glu Ile His Gly Asp Leu Val Met Asn			
	355	360	365
Ala Cys Val Val Pro Asp Gly Thr Tyr Glu Val Cys Ser Arg Thr Thr			
	370	375	380
Gly Gln Ala Ala Ala Glu Ser Ser Ser Ala Gly Thr Trp Thr Leu Asn			
	385	390	395
Val Leu Trp Lys Met Cys Gly Ile Asp Val His Met Asp Pro Asn Ile			
	405	410	415
Gly Lys Arg Leu Asn Ala Leu Gly Asn Thr Leu Thr Thr Leu Thr Gly			
	420	425	430
Glu Glu Asp Ile Asp Asp Ile Ala Asp Leu Asn Ser Val Asn Ile Ala			
	435	440	445
Asp Leu Ser Asp Glu Asp Glu Val Asp Thr Met Ser Pro Thr Ile His			
	450	455	460
Thr Glu Ala Thr Asp Tyr Arg Arg Gln Ala Ala Ser Ala Ser Gln Pro			
	465	470	475
Gly Glu Leu Arg Gly Arg Lys Ile Met Lys Arg Ile Val Asp Ile Arg			
	485	490	495
Glu Leu Asn Glu Gln Ala Lys Val Ile Asp Asp Leu Lys Lys Leu Gly			
	500	505	510
Ala Ser Glu Gly Thr Ile Asn Gln Glu Ile Gln Arg Tyr Gln Gln Leu			

515					520					525					
Glu	Ser	Val	Ala	Val	Asn	Asp	Ile	Arg	Arg	Asp	Val	Arg	Lys	Lys	Leu
530						535					540				
Arg	Arg	Ser	Ser	Met	Arg	Ala	Ala	Ser	Leu	Lys	Asp	Lys	Trp	Gly	Leu
545					550					555					560
Ser	Tyr	Lys	Pro	Ser	Tyr	Ser	Arg	Ser	Lys	Ser	Ile	Ser	Ala	Ser	Gly
				565					570						575
Arg	Pro	Pro	Leu	Lys	Arg	Met	Glu	Arg	Ala	Ser	Ser	Arg	Val	Gly	Glu
			580					585					590		
Thr	Glu	Glu	Leu	Pro	Glu	Ile	Arg	Val	Asp	Ala	Ala	Ser	Pro	Gly	Pro
	595					600					605				
Arg	Val	Thr	Phe	Asn	Ile	Gln	Asp	Thr	Phe	Pro	Glu	Glu	Thr	Glu	Leu
610					615					620					
Asp	Leu	Leu	Ser	Val	Thr	Ile	Glu	Gly	Pro	Ser	His	Tyr	Ser	Ser	Asn
625				630						635					640
Ser	Glu	Gly	Ser	Cys	Ser	Val	Phe	Ser	Ser	Pro	Lys	Thr	Pro	Gly	Gly
				645					650					655	
Phe	Ser	Pro	Gly	Ile	Pro	Phe	Gln	Thr	Glu	Glu	Gly	Arg	Arg	Asp	Asp
			660					665					670		
Ser	Leu	Ser	Ser	Thr	Ser	Glu	Asp	Ser	Glu	Lys	Asp	Glu	Lys	Asp	Glu
	675					680					685				
Asp	His	Glu	Arg	Glu	Arg	Phe	Tyr	Ile	Tyr	Arg	Lys	Pro	Ser	His	Thr
690					695					700					
Ser	Arg	Lys	Lys	Ala	Thr	Gly	Phe	Ala	Ala	Val	His	Gln	Leu	Phe	Thr
705				710						715					720
Glu	Arg	Trp	Pro	Thr	Thr	Pro	Val	Asn	Arg	Ser	Leu	Ser	Gly	Thr	Ala
				725				730						735	
Thr	Glu	Arg	Asn	Ile	Asp	Phe	Glu	Leu	Asp	Ile	Arg	Val	Glu	Ile	Asp
			740					745					750		
Ser	Gly	Lys	Cys	Val	Leu	His	Pro	Thr	Thr	Leu	Leu	Gln	Glu	His	Asp
	755					760					765				
Asp	Ile	Ser	Leu	Arg	Arg	Ser	Tyr	Asp	Arg	Ser	Ser	Arg	Ser	Leu	Asp
	770					775					780				
Gln	Asp	Ser	Pro	Ser	Lys	Lys	Lys	Lys	Phe	Gln	Thr	Asn	Tyr	Ala	Ser
785				790						795					800
Thr	Thr	His	Leu	Met	Thr	Gly	Lys	Lys	Val	Pro	Ser	Ser	Leu	Gln	Thr
			805						810					815	
Lys	Pro	Ser	Asp	Leu	Glu	Thr	Thr	Val	Phe	Tyr	Ile	Pro	Gly	Val	Asp
			820					825					830		
Val	Lys	Leu	His	Tyr	Asn	Ser	Lys	Thr	Leu	Lys	Thr	Glu	Ser	Pro	Asn
	835					840					845				
Ala	Ser	Arg	Gly	Ser	Ser	Leu	Pro	Arg	Thr	Leu	Ser	Lys	Glu	Ser	Lys
	850					855					860				
Leu	Tyr	Gly	Met	Lys	Asp	Ser	Ala	Thr	Ser	Pro	Pro	Ser	Pro	Pro	Leu
865				870					875						880
Pro	Ser	Thr	Val	Gln	Ser	Lys	Thr	Asn	Thr	Leu	Leu	Pro	Pro	Gln	Pro
				885					890					895	
Pro	Pro	Ile	Pro	Ala	Ala	Lys	Gly	Lys	Gly	Ser	Gly	Gly	Val	Lys	Thr
			900					905					910		
Ala	Lys	Leu	Tyr	Ala	Trp	Val	Ala	Leu	Gln	Ser	Leu	Pro	Glu	Glu	Met
	915					920					925				
Val	Ile	Ser	Pro	Cys	Leu	Leu	Asp	Phe	Leu	Glu	Lys	Ala	Leu	Glu	Thr
	930					935					940				
Ile	Pro	Ile	Thr	Pro	Val	Glu	Arg	Asn	Tyr	Thr	Ala	Val	Ser	Ser	Gln
945				950					955						960
Asp	Glu	Asp	Met	Gly	His	Phe	Glu	Ile	Pro	Asp	Pro	Met	Glu	Glu	Ser
				965					970					975	
Thr	Thr	Ser	Leu	Val	Ser	Ser	Ser	Thr	Ser	Ala	Tyr	Ser	Ser	Phe	Pro
			980					985					990		
Val	Asp	Val	Val	Val	Tyr	Val	Arg	Val	Gln	Pro	Ser	Gln	Ile	Lys	Phe
	995					1000					1005				
Ser	Cys	Leu	Pro	Val	Ser	Arg	Val	Glu	Cys	Met	Leu	Lys	Leu	Pro	Ser
	1010					1015					1020				
Leu	Asp	Leu	Val	Phe	Ser	Ser	Asn	Arg	Gly	Glu	Leu	Glu	Thr	Leu	Gly

1025	1030	1035	1040
Thr Thr Tyr Pro Ala Glu Thr Leu Ser Pro Gly Gly Asn Ala Thr Gln			
	1045	1050	1055
Ser Gly Thr Lys Thr Ser Ala Ser Lys Thr Gly Ile Pro Gly Ser Ser			
	1060	1065	1070
Gly Leu Gly Ser Pro Leu Gly Arg Ser Arg His Ser Ser Ser Gln Ser			
	1075	1080	1085
Asp Leu Thr Ser Ser Ser Ser Ser Ser Gly Leu Ser Phe Thr Ala			
	1090	1095	1100
Cys Met Ser Asp Phe Ser Leu Tyr Val Phe His Pro Tyr Gly Ala Gly			
1105	1110	1115	1120
Lys Gln Ile Thr Ala Val Ser Gly Leu Thr Pro Gly Ser Gly Gly Leu			
	1125	1130	1135
Gly Asn Val Asp Glu Glu Pro Thr Ser Val Thr Gly Arg Lys Asp Ser			
	1140	1145	1150
Leu Ser Ile Asn Leu Glu Phe Val Lys Val Ser Leu Ser Arg Ile Arg			
	1155	1160	1165
Arg Ser Gly Gly Ala Ser Phe Phe Glu Ser Gln Ser Val Ser Lys Ser			
	1170	1175	1180
Ala Ser Lys Met Asp Thr Thr Leu Ile Asn Ile Ser Ala Val Cys Asp			
1185	1190	1195	1200
Ile Gly Ser Ala Ser Phe Lys Tyr Asp Met Arg Arg Leu Ser Glu Ile			
	1205	1210	1215
Leu Ala Phe Pro Arg Ala Trp Tyr Arg Arg Ser Ile Ala Arg Arg Leu			
	1220	1225	1230
Phe Leu Gly Asp Gln Thr Ile Asn Leu Pro Thr Ser Gly Pro Gly Thr			
	1235	1240	1245
Pro Asp Ser Ile Glu Gly Val Ser Gln His Leu Ser Pro Glu Ser Ser			
	1250	1255	1260
Arg Lys Ala Tyr Cys Lys Thr Trp Glu Gln Pro Ser Gln Ser Ala Ser			
1265	1270	1275	1280
Phe Thr His Met Pro Gln Ser Pro Asn Val Phe Asn Glu His Met Thr			
	1285	1290	1295
Asn Ser Thr Met Ser Pro Gly Thr Val Gly Gln Ser Leu Lys Ser Pro			
	1300	1305	1310
Ala Ser Ile Arg Ser Arg Ser Val Ser Asp Ser Ser Val Pro Arg Arg			
	1315	1320	1325
Asp Ser Leu Ser Lys Thr Ser Thr Pro Phe Asn Lys Ser Asn Lys Ala			
	1330	1335	1340
Ala Ser Gln Gln Gly Thr Pro Trp Glu Thr Leu Val Val Phe Ala Ile			
1345	1350	1355	1360
Asn Leu Lys Gln Leu Asn Val Gln Met Asn Met Ser Asn Val Met Gly			
	1365	1370	1375
Asn Thr Thr Trp Thr Thr Ser Gly Leu Lys Ser Gln Gly Arg Leu Ser			
	1380	1385	1390
Val Gly Ser Asn Arg Asp Arg Glu Ile Ser Met Ser Val Gly Leu Gly			
	1395	1400	1405
Arg Ser Gln Leu Asp Ser Lys Gly Gly Val Val Gly Gly Thr Ile Asp			
	1410	1415	1420
Val Asn Ala Leu Glu Met Val Ala His Ile Ser Glu His Pro Asn Gln			
1425	1430	1435	1440
Gln Pro Ser His Lys Ile Gln Ile Thr Met Gly Ser Thr Glu Ala Arg			
	1445	1450	1455
Val Asp Tyr Met Gly Ser Ser Ile Leu Met Gly Ile Phe Ser Asn Ala			
	1460	1465	1470
Asp Leu Lys Leu Gln Asp Glu Trp Lys Val Asn Leu Tyr Asn Thr Leu			
	1475	1480	1485
Asp Ser Ser Ile Thr Asp Lys Ser Glu Ile Phe Val His Gly Asp Leu			
	1490	1495	1500
Lys Trp Asp Ile Phe Gln Val Met Ile Ser Arg Ser Thr Thr Pro Asp			
1505	1510	1515	1520
Leu Ile Lys Ile Gly Met Lys Leu Gln Glu Phe Phe Thr Gln Gln Phe			
	1525	1530	1535
Asp Thr Ser Lys Arg Ala Leu Ser Thr Trp Gly Pro Val Pro Tyr Leu			

	1540		1545		1550
Pro	Pro	Lys	Thr	Met	Thr
	1555		1560		1565
Leu	Leu	Asp	Ala	Ala	His
	1570		1575		1580
Val	Ser	Gly	Cys	His	Ile
1585		1590		1595	1600
Gly	Met	Gln	Phe	Gly	Ser
	1605		1610		1615
Leu	Ala	Cys	Phe	His	Gly
	1620		1625		1630
Phe	His	Leu	Glu	Glu	Pro
	1635		1640		1645
Ile	Trp	Glu	Asp	Gly	Ser
	1650		1655		1660
Leu	Asp	Phe	His	Leu	Gly
1665		1670		1675	1680
Ala	Leu	Glu	Ser	Pro	Met
	1685		1690		1695
His	Glu	Asn	Pro	Pro	His
	1700		1705		1710
Tyr	Val	Thr	Ala	Thr	Arg
	1715		1720		1725
Asp	Ala	Asn	Asn	Thr	Glu
	1730		1735		1740
Leu	Ser	Gly	Phe	Arg	Gly
1745		1750		1755	1760
Ile	Phe	Ala	Leu	Pro	Arg
	1765		1770		1775
Gln	Glu	Pro	Gln	Glu	Pro
	1780		1785		1790
Val	Glu	Cys	Ser	Val	Val
	1795		1800		1805
Met	Asp	Ala	Glu	Leu	Ile
	1810		1815		1820
Leu	Lys	Glu	Lys	Glu	Lys
1825		1830		1835	1840
Arg	Pro	Gly	Gln	Lys	Ser
	1845		1850		1855
Asp	Lys	Asp	Arg	Glu	Asp
	1860		1865		1870
Asp	Phe	Met	Cys	Asn	Thr
	1875		1880		1885
Ser	Trp	Thr	Gly	Arg	Lys
	1890		1895		1900
Gln	Lys	Leu	Gly	Phe	His
1905		1910		1915	1920
Gln	Arg	Gly	Val	Met	Asp
	1925		1930		1935
Lys	Lys	Leu	Gly	Thr	Ala
	1940		1945		1950
Asp	Lys	Glu	Glu	His	
	1955		1957		

<210> 3792

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3792

Gln Asn Gly Ser Thr Pro Leu His His Ala Ala Ser Lys Asn Arg His

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Glu Ile Ala Leu Met Leu Leu Glu Gly Gly Ala Asn Pro Asp Gly Lys
      20           25           30
Asp His Tyr Glu Ala Thr Ala Lys His Gln Ala Thr Ala Lys Gly Asn
      35           40           45
Phe Lys Met Ile His Ile Leu Leu Tyr Tyr Lys Ala Ser Thr Ile Ile
      50           55           60
Gln Asp Thr Glu Gly Asn Thr Pro Pro His Leu Val Cys Asp Arg Val
      65           70           75           80
Glu Glu Ala Lys Leu Leu Val Ser Gln Gly Ala Ser Ile Tyr Ile Glu
      85           90           95
Asn Lys Glu Glu Lys Asp Pro Leu Gln Val Ala Lys Gly Ala Leu Gly
      100          105          110
Leu Val Leu Lys Arg Met Val Glu Gly
      115          120 121

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<210> 3793
<211> 112
<212> PRT
<213> Homo sapiens

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      <400> 3793
Asp Ile Val Pro Asn Pro Lys Met Ala Pro Leu Gly Asp Glu Ala Pro
      1           5           10           15
Thr Leu Glu Lys Val Leu Thr Pro Glu Leu Ser Glu Glu Glu Val Ser
      20           25           30
Thr Arg Asp Asp Ile Gln Phe His His Phe Ser Ser Glu Glu Ala Leu
      35           40           45
Gln Lys Val Lys Tyr Phe Val Ala Lys Glu Asp Pro Ser Ser Gln Glu
      50           55           60
Glu Ala His Thr Pro Glu Ala Pro Pro Pro Gln Pro Pro Ser Ser Glu
      65           70           75           80
Arg Cys Leu Gly Glu Met Lys Cys Thr Leu Val Arg Gly Asp Ser Ser
      85           90           95
Pro Arg Gln Ala Glu Leu Lys Ser Gly Pro Ala Ser Arg Pro Ala Leu
      100          105          110          112

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<210> 3794
<211> 87
<212> PRT
<213> Homo sapiens

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<221> misc_feature
<222> (1)...(87)
<223> Xaa = any amino acid or nothing

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      <400> 3794
Ser Tyr Trp Val Gly Glu Asp Tyr Thr Tyr Lys Phe Phe Glu Val Ile
      1           5           10           15
Leu Ile Asp Pro Phe His Lys Ala Ile Arg Arg Asn Pro Asp Thr Gln
      20           25           30
Trp Ile Ser Lys Ala Val Tyr Lys His Arg Glu Met Cys Gly Leu Thr
      35           40           45
Ser Thr Gly Arg Lys Ser His Gly Leu Glu Lys Asp Arg Met Phe Pro
      50           55           60
His Ala Ile Gly Gly Ser Cys Arg Ala Ala Xaa Arg Arg Arg Lys Thr

```

65 70
Leu Gln Phe Pro Cys Tyr His
 85 87

75

80

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<210> 3795
<211> 189
<212> PRT
<213> Homo sapiens
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<400> 3795																
Gly 1	Gly	Met	Asp	Ser 5	Arg	Val	Ser	Gly	Thr 10	Thr	Ser	Asn	Gly	Glu 15	Thr	
Lys	Pro	Val	Tyr 20	Pro	Val	Met	Glu	Lys 25	Lys	Glu	Glu	Asp	Gly 30	Thr	Leu	
Glu	Arg	Gly 35	His	Trp	Asn	Asn	Lys 40	Met	Glu	Phe	Val	Leu	Ser 45	Val	Ala	
Gly 50	Glu	Ile	Ile	Gly	Leu	Gly 55	Asn	Val	Trp	Arg	Phe 60	Pro	Tyr	Leu	Cys	
Tyr 65	Lys	Asn	Gly	Gly 70	Gly	Ala	Phe	Phe	Ile	Pro 75	Tyr	Leu	Val	Phe	Leu	
Phe	Thr	Cys	Gly	Ile 85	Pro	Val	Phe	Leu	Leu 90	Glu	Thr	Ala	Leu	Gly 95	Gln	
Tyr	Thr	Ser	Gln 100	Gly	Gly	Val	Thr	Ala 105	Trp	Arg	Lys	Ile	Cys 110	Pro	Ile	
Phe	Glu	Gly 115	Ile	Gly	Tyr	Ala	Ser 120	Gln	Met	Ile	Val	Ile 125	Leu	Leu	Asn	
Val	Tyr	Tyr 130	Ile	Ile	Val	Leu	Ala 135	Trp	Ala	Leu	Phe 140	Tyr	Leu	Phe	Ser	
Ser 145	Phe	Thr	Ile	Asp	Leu	Pro	Trp	Gly	Gly	Cys 155	Tyr	His	Glu	Trp	Asn	
Thr	Glu	His	Cys 165	Met	Glu	Phe	Gln	Lys	Thr 170	Asn	Gly	Ser	Leu	Asn 175	Gly	
Thr	Ser	Glu	Asn 180	Ala	Thr	Ser	Pro	Val 185	Ile	Glu	Phe	Trp				

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<210> 3796
<211> 196
<212> PRT
<213> Homo sapiens
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<400> 3796															
Lys	Pro	Ala	Ser	Thr	Tyr	Ser	Thr	Ser	Gln	Pro	Ser	Met	Ala	Pro	Leu
1				5					10					15	
Leu	Pro	Ile	Arg	Thr	Leu	Pro	Leu	Ile	Leu	Ile	Leu	Leu	Ala	Leu	Leu
			20					25					30		
Ser	Pro	Gly	Ala	Ala	Asp	Phe	Asn	Ile	Ser	Ser	Leu	Ser	Gly	Leu	Leu
		35					40					45			
Ser	Pro	Ala	Leu	Thr	Glu	Ser	Leu	Leu	Val	Ala	Leu	Pro	Pro	Cys	His
	50					55					60				
Leu	Thr	Gly	Gly	Asn	Ala	Thr	Leu	Met	Val	Arg	Arg	Ala	Asn	Asp	Ser
65				70						75				80	
Lys	Val	Val	Thr	Ser	Ser	Phe	Val	Val	Pro	Pro	Cys	Arg	Gly	Arg	Arg
				85					90					95	
Glu	Leu	Val	Ser	Val	Val	Asp	Ser	Gly	Ala	Gly	Phe	Thr	Val	Thr	Arg
			100					105					110		
Leu	Ser	Ala	Tyr	Gln	Val	Thr	Asn	Leu	Val	Pro	Gly	Thr	Lys	Phe	Tyr
		115					120					125			
Ile	Ser	Tyr	Leu	Val	Lys	Lys	Gly	Thr	Ala	Thr	Glu	Ser	Ser	Arg	Glu

130	135	140
Ile Pro Met Phe Thr Leu	Pro Arg Arg Asn Met	Glu Ser Ile Gly Leu
145	150	155
Gly Met Ala Arg Thr Gly	Gly Met Val Val Ile	Thr Val Leu Leu Ser
	165	170
Val Ala Met Phe Leu Leu	Val Leu Gly Phe Ile	Ile Ala Leu Ala Leu
	180	185
Gly Ser Arg Lys		190
195	196	

<210> 3797

<211> 518

<212> PRT

<213> Homo sapiens

<400> 3797

Ala Thr Arg Leu Leu Arg	Gly Ser Gly Ser Trp Gly Cys Ser Arg Leu
1	5 10 15
Arg Phe Gly Pro Pro Ala Tyr Arg	Arg Phe Ser Ser Gly Gly Ala Tyr
	20 25 30
Pro Asn Ile Pro Leu Ser Ser Pro Leu Pro Gly Val Pro Lys Pro Val	
	35 40 45
Phe Ala Thr Val Asp Gly Gln Glu Lys Phe Glu Thr Lys Val Thr Thr	
	50 55 60
Leu Asp Asn Gly Leu Arg Val Ala Ser Gln Asn Lys Phe Gly Gln Phe	
	65 70 75
Cys Thr Val Gly Ile Leu Ile Asn Ser Gly Ser Arg Tyr Glu Ala Lys	
	85 90 95
Tyr Leu Ser Gly Ile Ala His Phe Leu Glu Lys Leu Ala Phe Ser Ser	
	100 105 110
Thr Ala Arg Phe Asp Ser Lys Asp Glu Ile Leu Leu Thr Leu Glu Lys	
	115 120 125
His Gly Gly Ile Cys Asp Cys Gln Thr Ser Arg Asp Thr Thr Met Tyr	
	130 135 140
Ala Val Ser Ala Asp Ser Lys Gly Leu Asp Thr Val Val Ala Leu Leu	
	145 150 155
Ala Asp Val Val Leu Gln Pro Arg Leu Thr Asp Glu Glu Val Glu Met	
	165 170 175
Thr Arg Met Ala Val Gln Phe Glu Leu Glu Asp Leu Asn Leu Arg Pro	
	180 185 190
Asp Pro Glu Pro Leu Leu Thr Glu Met Ile His Glu Ala Ala Tyr Arg	
	195 200 205
Glu Asn Thr Val Gly Leu His Arg Phe Cys Pro Thr Glu Asn Val Ala	
	210 215 220
Lys Ile Asn Arg Glu Val Leu His Ser Tyr Leu Arg Asn Tyr Tyr Thr	
	225 230 235
Pro Asp Arg Met Val Leu Ala Gly Val Gly Val Glu His Glu His Leu	
	245 250 255
Val Asp Cys Ala Arg Lys Tyr Leu Leu Gly Val Gln Pro Ala Trp Gly	
	260 265 270
Ser Ala Glu Ala Val Asp Ile Asp Arg Ser Val Ala Gln Tyr Thr Gly	
	275 280 285
Gly Ile Ala Lys Leu Glu Arg Asp Met Ser Asn Val Ser Leu Gly Pro	
	290 295 300
Thr Pro Ile Pro Glu Leu Thr His Ile Met Val Gly Leu Glu Ser Cys	
	305 310 315
Ser Phe Leu Glu Glu Asp Phe Ile Pro Phe Ala Val Leu Asn Met Met	
	325 330 335
Met Gly Gly Gly Gly Ser Phe Ser Ala Gly Gly Pro Gly Lys Gly Met	
	340 345 350
Phe Ser Arg Leu Tyr Leu Asn Val Leu Asn Arg His His Trp Met Tyr	

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      355              360              365
Asn Ala Thr Ser Tyr His His Ser Tyr Glu Asp Thr Gly Leu Leu Cys
  370              375              380
Ile His Ala Ser Ala Asp Pro Arg Gln Val Arg Glu Met Val Glu Ile
 385              390              395              400
Ile Thr Lys Glu Phe Ile Leu Met Gly Gly Thr Val Asp Thr Val Glu
      405              410              415
Leu Glu Arg Ala Lys Thr Gln Leu Thr Ser Met Leu Met Met Asn Leu
      420              425              430
Glu Ser Arg Pro Val Ile Phe Glu Asp Val Gly Arg Gln Val Leu Ala
      435              440              445
Thr Arg Ser Arg Lys Leu Pro His Glu Leu Cys Thr Leu Ile Arg Asn
      450              455              460
Val Lys Pro Glu Asp Val Lys Arg Val Ala Ser Lys Met Leu Arg Gly
      465              470              475              480
Lys Pro Ala Val Ala Leu Gly Asp Leu Thr Asp Leu Pro Thr Tyr
      485              490              495
Glu His Ile Gln Thr Ala Leu Ser Ser Lys Asp Gly Arg Leu Pro Arg
      500              505              510
Thr Tyr Arg Leu Phe Arg
      515              518

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<210> 3798
<211> 229
<212> PRT
<213> Homo sapiens

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      <400> 3798
Lys Arg Leu Val Glu Ala Gly Val Pro Arg Thr Phe Asp Gly Ile Val
  1              5              10              15
Gly Glu Gly Gly Ala Gln Ser Arg Ser Cys Trp Pro Trp Gly Val Thr
      20              25              30
Ala Gln Thr Pro Ala Phe Ser Ala Asp Ser Leu Asn Cys Leu Lys Asn
      35              40              45
Cys Met Ser Ile Thr Met Gly Ser Val Arg Pro Ser Val Glu Gln Phe
      50              55              60
His Lys Tyr Leu Pro Trp Phe Leu Asn Asp Arg Pro Asn Ile Lys Cys
      65              70              75              80
Pro Lys Gly Gly Leu Ala Ala Tyr Ser Thr Ser Val Asn Leu Thr Ser
      85              90              95
Asp Gly Gln Val Leu Ala Ser Arg Phe Met Ala Tyr His Lys Pro Leu
      100              105              110
Lys Asn Ser Gln Asp Tyr Thr Glu Ala Leu Arg Ala Ala Arg Glu Leu
      115              120              125
Ala Ala Asn Ile Thr Ala Asp Leu Arg Lys Val Pro Gly Thr Asp Pro
      130              135              140
Ala Phe Glu Val Phe Pro Tyr Thr Ile Thr Asn Val Phe Tyr Glu Gln
      145              150              155              160
Tyr Leu Thr Ile Leu Pro Glu Gly Leu Phe Met Leu Ser Leu Cys Leu
      165              170              175
Val Pro Thr Phe Ala Val Ser Cys Leu Leu Leu Gly Leu Asp Leu Arg
      180              185              190
Ser Gly Leu Leu Asn Leu Leu Ser Ile Val Met Ile Leu Val Asp Thr
      195              200              205
Val Gly Phe Met Ala Leu Trp Gly Ile Ser Tyr Asn Ala Val Ser Leu
      210              215              220
Ile Asn Leu Val Ser
      225              229

```


<210> 3799
 <211> 229
 <212> PRT
 <213> Homo sapiens

<400> 3799
 Lys Arg Leu Val Glu Ala Gly Val Pro Arg Thr Phe Asp Gly Ile Val
 1 5 10 15
 Gly Glu Gly Gly Ala Gln Ser Arg Ser Cys Trp Pro Trp Gly Val Thr
 20 25 30
 Ala Gln Thr Pro Ala Phe Ser Ala Asp Ser Leu Asn Cys Leu Lys Asn
 35 40 45
 Cys Met Ser Ile Thr Met Gly Ser Val Arg Pro Ser Val Glu Gln Phe
 50 55 60
 His Lys Tyr Leu Pro Trp Phe Leu Asn Asp Arg Pro Asn Ile Lys Cys
 65 70 75 80
 Pro Lys Gly Gly Leu Ala Ala Tyr Ser Thr Ser Val Asn Leu Thr Ser
 85 90 95
 Asp Gly Gln Val Leu Ala Ser Arg Phe Met Ala Tyr His Lys Pro Leu
 100 105 110
 Lys Asn Ser Gln Asp Tyr Thr Glu Ala Leu Arg Ala Ala Arg Glu Leu
 115 120 125
 Ala Ala Asn Ile Thr Ala Asp Leu Arg Lys Val Pro Gly Thr Asp Pro
 130 135 140
 Ala Phe Glu Val Phe Pro Tyr Thr Ile Thr Asn Val Phe Tyr Glu Gln
 145 150 155 160
 Tyr Leu Thr Ile Leu Pro Glu Gly Leu Phe Met Leu Ser Leu Cys Leu
 165 170 175
 Val Pro Thr Phe Ala Val Ser Cys Leu Leu Gly Leu Asp Leu Arg
 180 185 190
 Ser Gly Leu Leu Asn Leu Leu Ser Ile Val Met Ile Leu Val Asp Thr
 195 200 205
 Val Gly Phe Met Ala Leu Trp Gly Ile Ser Tyr Asn Ala Val Ser Leu
 210 215 220
 Ile Asn Leu Val Ser
 225 229

<210> 3800
 <211> 261
 <212> PRT
 <213> Homo sapiens

<400> 3800
 Gly Ile Phe Arg Ser Leu Arg Val Leu Phe Pro Leu Phe Ser Val Gly
 1 5 10 15
 Arg Pro Gln Phe Ala Arg Ser Leu Ser Ala Ala Pro Gln Leu Ser Asp
 20 25 30
 Thr Ala Asp Thr Met Gly Phe Gly Asp Leu Lys Ser Pro Ala Gly Leu
 35 40 45
 Gln Val Leu Asn Asp Tyr Leu Ala Asp Lys Ser Tyr Ile Glu Gly Tyr
 50 55 60
 Val Pro Ser Gln Ala Asp Val Ala Val Phe Glu Ala Val Ser Ser Pro
 65 70 75 80
 Pro Pro Ala Asp Leu Cys His Ala Leu Arg Trp Tyr Asn His Ile Lys
 85 90 95
 Ser Tyr Glu Lys Glu Lys Ala Ser Leu Pro Gly Val Lys Lys Ala Leu
 100 105 110
 Gly Lys Tyr Gly Pro Ala Asp Val Glu Asp Thr Thr Gly Ser Gly Ala
 115 120 125
 Thr Asp Ser Lys Asp Asp Asp Asp Ile Asp Leu Phe Gly Ser Asp Asp

130	135	140
Glu Glu Glu Ser Glu Glu	Ala Lys Arg Leu Arg	Glu Glu Arg Leu Ala
145	150	155
Gln Tyr Glu Ser Lys Lys	Ala Lys Lys Pro Ala	Leu Val Ala Lys Ser
165	170	175
Ser Ile Leu Leu Asp Val	Lys Pro Trp Asp Asp	Glu Thr Asp Met Ala
180	185	190
Lys Leu Glu Glu Cys Val	Arg Ser Ile Gln Ala	Asp Gly Leu Val Trp
195	200	205
Gly Ser Ser Lys Leu Val	Pro Val Gly Tyr Gly	Ile Lys Lys Leu Gln
210	215	220
Ile Gln Cys Val Val Glu	Asp Asp Lys Val Gly	Thr Asp Met Leu Glu
225	230	235
Glu Gln Ile Thr Ala Phe	Glu Asp Tyr Val Gln	Ser Met Asp Val Ala
245	250	255
Ala Phe Asn Lys Ile		
260	261	

<210> 3801
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 3801
Ser Arg Glu Met Glu Leu Val Thr Phe Arg Asp Val Ala Ile Glu Phe
1 5 10 15
Ser Pro Glu Glu Trp Lys Cys Leu Asp Pro Ala Gln Gln Asn Leu Tyr
20 25 30
Arg Asp Val Met Leu Glu Asn Tyr Arg Asn Leu Val Ser Leu Gly Phe
35 40 45
Val Ile Ser Asn Pro Asp Leu Val Thr Cys Leu Glu Gln Ile Lys Glu
50 55 60
Pro Cys Asn Leu Lys Ile His Glu Thr Ala Ala Lys Pro Pro Ala Ile
65 70 75 80
Cys Ser Pro Phe Ser Gln Asp Leu Ser Pro Val Gln Gly Ile Glu Asp
85 90 95
Ser Phe His Lys Leu Ile Leu Lys Arg Tyr Glu Lys Cys Gly His Glu
100 105 110
Asn Leu Gln Leu Arg Lys Gly Cys Lys Arg Val Asn Glu Cys Lys Val
115 120 125
Gln Lys Gly Val Asn Asn Gly Val Tyr Gln Cys Leu Ser Thr Thr Gln
130 135 140
Ser Lys Ile Phe Gln Cys Asn Thr Cys Val Arg Val Phe Ser Thr Ser
145 150 155 160
Ser His Ser Asn Lys His Lys
165 167

<210> 3802
 <211> 476
 <212> PRT
 <213> Homo sapiens

<400> 3802
Val Thr Val Ser Pro Glu Thr His Met Asp Leu Thr Lys Gly Cys Val
1 5 10 15
Thr Phe Glu Asp Ile Ala Ile Tyr Phe Ser Gln Asp Glu Trp Gly Leu
20 25 30
Leu Asp Glu Ala Gln Arg Leu Leu Tyr Leu Glu Val Met Leu Glu Asn

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<210> 3803
<211> 141
<212> PRT
<213> Homo sapiens
```

<400> 3803

```

Leu Phe Pro Phe Leu Gly Ser Glu Ser Lys Asn Gly Glu Ala Asp Ser
 1           5           10           15
Ser Asp Lys Glu Met Lys His Gly Gln Lys Ser Pro Thr Gly Lys Gln
           20           25           30
Thr Ser Gln His Leu Lys Arg Leu Lys Lys Ser Gly Leu Gly His Leu
           35           40           45
Lys Trp Thr Lys Ala Glu Asp Ile Asp Ile Glu Thr Pro Gly Ser Ile
           50           55           60
Leu Val Asn Thr Asn Leu Arg Ala Leu Ile Asn Lys His Thr Phe Ala
           65           70           75           80
Ser Leu Pro Gln His Phe Gln Gln Tyr Leu Leu Leu Leu Leu Pro Glu
           85           90           95
Val Asp Arg Gln Met Gly Ser Asp Gly Ile Leu Arg Leu Ser Thr Ser
           100          105          110
Ala Leu Asn Asn Glu Phe Phe Ala Tyr Ala Ala Gln Gly Trp Lys Gln
           115          120          125
Arg Leu Ala Glu Gly Lys Phe Val Phe Ser Ile Ile Met
           130          135          140 141

```

<210> 3804

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3804

```

Ser Ser Ser Arg Ala Ser Pro Pro Glu His Pro Ser Ser Gln Ala His
 1           5           10           15
Cys Gly Pro Leu Val Leu Ser His Ala Cys Pro Glu Val Thr Asn Lys
           20           25           30
Trp Ser Thr Gly Ser Ser Ser Ser Pro Asn Ser Ser Trp Val Ser Ser
           35           40           45
Pro Leu Gln Pro Glu Gly Leu Ser Gly Ser Ser Arg Met Lys Gly Gly
           50           55           60
Ser Ala Thr Lys Ile Leu Leu Glu Thr Leu Leu Leu Ala Ala His Met
           65           70           75           80
Thr Ala Asp Gln Gly Ile Ala Ser Ser Gln Arg Cys Leu Leu
           85           90           94

```

<210> 3805

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3805

```

Gln Ser Ala Asp Thr Leu Phe Pro Gly Asp Ile Asn Phe Asn Val Ser
 1           5           10           15
Gly Leu Phe Ser Ala Val Thr Leu Gln Asp Thr Val Ser Asp Arg Leu
           20           25           30
Ala Ser Glu Glu Leu Pro Ser Thr Ala Val Pro Thr Pro Ala Thr Thr
           35           40           45
Pro Ala Pro Ala Pro Ala Pro Ala Thr Ala Pro Ala Leu Val
           50           55           60
Ser Ala Ala Thr Lys Glu Arg Thr Glu Ser Glu Val Pro Pro Arg Pro
           65           70           75           80
Ala Ser Pro Lys Val Thr Arg Ser Pro Pro Glu Thr Ala Ala Pro Val
           85           90           95
Glu Asp Met Ala Arg Arg Ser Glu Leu Ala Val Gly Gly Glu Glu Gly

```

```
<210> 3806
<211> 328
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(328)
<223> Xaa = any amino acid or nothing
```

5567

<210> 3807

<211> 194

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(194)

<223> Xaa = any amino acid or nothing

<400> 3807

```

Arg Cys Pro Ser Leu Leu Pro Pro Ser Trp Pro Leu Pro Thr Leu Gln
 1           5           10           15
Thr Leu Thr Arg Thr Pro Gly Asn Lys Ala Ile Ala Gly Gly Ala Gly
 20           25           30
Leu Trp Ala Val Leu Trp Gly Ser Glu Arg Thr Pro Pro Tyr Arg Xaa
 35           40           45
Gly Asn Xaa Asn Gln Arg Gly Ala Val Pro Cys Leu Arg Pro His Arg
 50           55           60
Leu Arg Pro Gln Asp Lys Phe Leu Val Leu Ala Ser Asp Gly Leu Trp
 65           70           75           80
Asp Met Leu Ser Asn Glu Asp Val Val Arg Leu Val Val Gly His Leu
 85           90           95
Ala Glu Ala Asp Trp His Lys Thr Asp Leu Ala Gln Arg Pro Ala Asn
 100          105          110
Leu Gly Leu Met Gln Ser Leu Leu Leu Gln Arg Lys Ala Ser Gly Leu
 115          120          125
His Glu Ala Asp Gln Asn Ala Ala Thr Arg Leu Ile Arg His Ala Ile
 130          135          140
Gly Asn Asn Glu Tyr Gly Glu Met Glu Ala Glu Arg Leu Ala Ala Met
 145          150          155          160
Leu Thr Leu Pro Glu Asp Leu Ala Arg Met Tyr Arg Asp Asp Ile Thr
 165          170          175
Val Thr Val Val Tyr Phe Asn Ser Glu Ser Ile Gly Ala Tyr Tyr Lys
 180          185          190
Gly Gly
 194

```

<210> 3808

<211> 723

<212> PRT

<213> Homo sapiens

<400> 3808

```

Ser Gln Tyr Ser Glu Ser Val Ala Gly Arg Gln Ala Ser Pro Glu Arg
 1           5           10           15
Leu Leu Gly Ser Tyr His Ala Met Ala Ser Thr Val Glu Gly Gly Asp
 20           25           30
Thr Ala Leu Leu Pro Glu Phe Pro Arg Gly Pro Leu Asp Ala Tyr Arg
 35           40           45
Ala Arg Ala Ser Phe Ser Trp Lys Glu Leu Ala Leu Phe Thr Glu Gly
 50           55           60
Glu Gly Met Leu Arg Phe Lys Lys Thr Ile Phe Ser Ala Leu Glu Asn
 65           70           75           80
Asp Pro Leu Phe Ala Arg Ser Pro Gly Ala Asp Leu Ser Leu Glu Lys
 85           90           95
Tyr Arg Glu Leu Asn Phe Leu Arg Cys Lys Arg Ile Phe Glu Tyr Asp
 100          105          110
Phe Leu Ser Val Glu Asp Met Phe Lys Ser Pro Leu Lys Val Pro Ala
 115          120          125
Leu Ile Gln Cys Leu Gly Met Tyr Asp Ser Ser Leu Ala Ala Lys Tyr

```

5569

PCT/US01/04098

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<210> 3809
<211> 237
<212> PRT
<213> Homo sapiens
```

```
<210> 3810
<211> 172
<212> PRT
<213> Homo sapiens
```

5570

			20					25					30				
Arg	Ser	His	Pro	Ala	Thr	Arg	Arg	Pro	Ala	Ser	Gly	Pro	Ala	Met	Gly		
		35						40				45					
Lys	Thr	Asn	Ser	Lys	Leu	Ala	Pro	Glu	Val	Leu	Glu	Asp	Leu	Val	Gln		
		50				55					60						
Asn	Thr	Glu	Phe	Ser	Glu	Gln	Glu	Leu	Lys	Gln	Trp	Tyr	Lys	Gly	Phe		
		65			70					75					80		
Leu	Lys	Asp	Cys	Pro	Ser	Gly	Ile	Leu	Asn	Leu	Glu	Glu	Phe	Gln	Gln		
			85						90					95			
Leu	Tyr	Ile	Lys	Phe	Phe	Pro	Tyr	Gly	Asp	Ala	Ser	Lys	Phe	Ala	Gln		
			100					105					110				
His	Ala	Phe	Arg	Thr	Phe	Asp	Lys	Asn	Gly	Asp	Gly	Thr	Ile	Asp	Phe		
		115					120					125					
Arg	Glu	Phe	Ile	Cys	Ala	Leu	Ser	Val	Thr	Ser	Arg	Gly	Ser	Phe	Glu		
		130				135					140						
Gln	Lys	Leu	Asn	Trp	Ala	Phe	Glu	Met	Tyr	Asp	Leu	Asp	Gly	Asp	Gly		
		145			150					155					160		
Arg	Ile	Thr	Arg	Leu	Glu	Met	Leu	Glu	Ile	Ile	Glu						
				165					170		172						

<210> 3811

<211> 355

<212> PRT

<213> Homo sapiens

<400> 3811

Gly	Cys	Gly	Tyr	Gly	Cys	Ser	Gly	Ala	Gly	Gly	Ala	Ala	Ile	Gly	Glu		
1				5					10					15			
Pro	Met	Ala	Lys	Trp	Gly	Glu	Gly	Asp	Pro	Arg	Trp	Ile	Val	Glu	Glu		
		20						25					30				
Arg	Ala	Asp	Ala	Thr	Asn	Val	Asn	Asn	Trp	His	Trp	Thr	Glu	Arg	Asp		
		35					40					45					
Ala	Ser	Asn	Trp	Ser	Thr	Asp	Lys	Leu	Lys	Thr	Leu	Phe	Leu	Ala	Val		
		50				55					60						
Gln	Val	Gln	Asn	Glu	Glu	Gly	Lys	Cys	Glu	Val	Thr	Glu	Val	Ser	Lys		
		65			70					75				80			
Leu	Asp	Gly	Glu	Ala	Ser	Ile	Asn	Asn	Arg	Lys	Gly	Lys	Leu	Ile	Phe		
			85					90					95				
Phe	Tyr	Glu	Trp	Ser	Val	Lys	Leu	Asn	Trp	Thr	Gly	Thr	Ser	Lys	Ser		
		100						105				110					
Gly	Val	Gln	Tyr	Lys	Gly	His	Val	Glu	Ile	Pro	Asn	Leu	Ser	Asp	Glu		
		115				120					125						
Asn	Ser	Val	Asp	Glu	Val	Glu	Ile	Ser	Val	Ser	Leu	Ala	Lys	Asp	Glu		
		130				135					140						
Pro	Asp	Thr	Asn	Leu	Val	Ala	Leu	Met	Lys	Glu	Gly	Val	Lys	Leu			
		145			150					155				160			
Leu	Arg	Glu	Ala	Met	Gly	Ile	Tyr	Ile	Ser	Thr	Leu	Lys	Thr	Glu	Phe		
			165						170					175			
Thr	Gln	Gly	Met	Ile	Leu	Pro	Thr	Met	Asn	Gly	Glu	Ser	Val	Asp	Pro		
		180						185					190				
Val	Gly	Gln	Pro	Ala	Leu	Lys	Thr	Glu	Glu	Arg	Lys	Ala	Lys	Pro	Ala		
		195				200					205						
Pro	Ser	Lys	Thr	Gln	Ala	Arg	Pro	Val	Gly	Val	Lys	Ile	Pro	Thr	Cys		
		210				215					220						
Lys	Ile	Thr	Leu	Lys	Glu	Thr	Phe	Leu	Thr	Ser	Pro	Glu	Glu	Leu	Tyr		
		225			230					235				240			
Arg	Val	Phe	Thr	Thr	Gln	Glu	Leu	Val	Gln	Ala	Phe	Thr	His	Ala	Pro		
			245						250					255			
Ala	Thr	Leu	Glu	Ala	Asp	Arg	Gly	Gly	Lys	Phe	His	Met	Val	Asp	Gly		
			260				265					270					
Asn	Val	Ser	Gly	Glu	Phe	Thr	Asp	Leu	Val	Pro	Glu	Lys	His	Ile	Val		

```

      275              280              285
Met Lys Trp Arg Phe Lys Ser Trp Pro Glu Gly His Phe Ala Thr Ile
  290              295              300
Thr Leu Thr Phe Ile Asp Lys Asn Gly Glu Thr Glu Leu Cys Met Glu
  305              310              315              320
Gly Arg Gly Ile Pro Ala Pro Glu Glu Glu Arg Thr Arg Gln Gly Trp
      325              330              335
Gln Arg Tyr Tyr Phe Glu Gly Ile Lys Gln Thr Phe Gly Tyr Gly Ala
      340              345              350
Arg Leu Phe
      355

```

```

<210> 3812
<211> 179
<212> PRT
<213> Homo sapiens

```

```

<400> 3812
Pro Cys Gly Thr Ala Ala Ser Thr His Ala Tyr Asp Arg Arg Ala Lys
  1              5              10              15
Cys Arg Gln Gln Gln Gln Gln Gln Asn Gly Gly Gln Asn Lys Val
      20              25              30
Arg Pro Ala Lys Lys Lys Thr Ser Pro Ala Arg Glu Val Ser Ser Glu
      35              40              45
Ser Gly Thr Ser Gly Gln Phe Thr Pro Pro Ser Ser Thr Ser Val Pro
      50              55              60
Thr Ile Ala Ser Ser Ser Ala Pro Val Ser Ile Trp Ser Pro Ala Ser
      65              70              75              80
Ile Ser Pro Leu Ser Asp Pro Leu Ser Thr Ser Ser Ser Cys Met Gln
      85              90              95
Arg Ser Tyr Pro Met Thr Tyr Thr Gln Ala Ser Gly Tyr Ser Gln Gly
      100              105              110
Tyr Ala Gly Ser Thr Ser Tyr Phe Gly Gly Met Asp Cys Gly Ser Tyr
      115              120              125
Leu Thr Pro Met His His Gln Leu Pro Gly Pro Gly Ala Thr Leu Ser
      130              135              140
Pro Met Gly Thr Asn Ala Val Thr Ser His Leu Asn Gln Ser Pro Ala
      145              150              155              160
Ser Leu Ser Thr Gln Gly Tyr Gly Ala Ser Lys Leu Trp Gly Phe Asn
      165              170              175
Phe Asn His
      179

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<210> 3813
<211> 338
<212> PRT
<213> Homo sapiens

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<221> misc_feature
<222> (1)...(338)
<223> Xaa = any amino acid or nothing

```

```

<400> 3813
Cys Thr Glu Pro Pro Arg Arg Ser Thr Arg Thr Pro Ala Ala Leu Ala
  1              5              10              15
Ser Leu Arg Pro Tyr Thr Asp Tyr Val Val Val Ser Asp Gln Ile Leu
      20              25              30
Gln Glu Ser Glu Asp Phe Phe Thr Leu Ile Glu Ser His Glu Gly Lys

```

```

      35              40              45
Pro Leu Lys Leu Met Val Tyr Asn Ser Lys Ser Asp Ser Cys Arg Glu
      50              55              60
Val Thr Val Thr Pro Asn Ala Ala Trp Gly Gly Glu Gly Ser Leu Gly
      65              70              75              80
Cys Gly Ile Gly Tyr Gly Tyr Leu His Arg Ile Pro Thr Gln Pro Pro
      85              90              95
Ser Tyr His Lys Lys Pro Pro Gly Thr Pro Pro Pro Ser Ala Leu Pro
      100              105              110
Leu Gly Ala Pro Pro Pro Asp Ala Leu Pro Pro Gly Pro Thr Pro Glu
      115              120              125
Asp Ser Pro Ser Leu Glu Thr Gly Ser Arg Gln Ser Asp Tyr Met Glu
      130              135              140
Ala Leu Leu Gln Ala Pro Gly Ser Ser Met Glu Asp Pro Leu Pro Gly
      145              150              155              160
Pro Gly Ser Pro Ser His Ser Ala Pro Asp Pro Asp Gly Leu Pro His
      165              170              175
Phe Met Glu Thr Pro Leu Gln Pro Pro Pro Pro Val Gln Arg Val Met
      180              185              190
Asp Pro Gly Phe Leu Asp Val Ser Gly Ile Ser Leu Leu Asp Asn Ser
      195              200              205
Asn Ala Ser Val Trp Pro Ser Leu Pro Ser Ser Thr Glu Leu Thr Thr
      210              215              220
Thr Ala Val Ser Thr Ser Gly Pro Glu Asp Ile Cys Ser Ser Ser Ser
      225              230              235              240
Ser His Glu Arg Gly Gly Glu Ala Thr Trp Ser Gly Ser Glu Phe Glu
      245              250              255
Val Ser Phe Leu Asp Ser Pro Gly Ala Gln Ala Gln Ala Asp His Leu
      260              265              270
Pro Gln Leu Thr Leu Pro Asp Ser Leu Thr Ser Ala Ala Ser Pro Glu
      275              280              285
Asp Gly Leu Ser Ala Glu Leu Leu Glu Ala Gln Ala Glu Glu Glu Pro
      290              295              300
Ala Ser Thr Glu Gly Leu Asp Thr Gly Thr Glu Ala Glu Gly Leu Asp
      305              310              315              320
Ser Gln Ala Gln Ile Ser Thr Thr Glu Xaa His Pro Gly Leu Xaa Gln
      325              330              335
Gly Pro
      338

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<210> 3814

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3814

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Val Phe Trp Gln Val Arg Asn Ala Gly Ser Ser Pro Leu Ser Ala Ala
  1              5              10              15
Cys Pro Leu Phe Arg Thr Pro Ala Pro Gln Pro Cys Gly Ser Trp Gly
      20              25              30
Arg Cys Cys Ile Pro His Ala Ser Thr Gly Cys Arg Pro Met Ala Glu
      35              40              45
Arg Gly Glu Leu Asp Leu Thr Gly Ala Lys Gln Asn Thr Gly Val Trp
      50              55              60
Leu Val Lys Val Pro Lys Tyr Leu Ser Gln Gln Trp Ala Lys Ala Ser
      65              70              75              80
Gly Arg Gly Glu Val Gly Lys Leu Arg Ile Ala Lys Thr Gln Gly Arg
      85              90              95
Thr Glu Val Ser Phe Thr Leu Asn Glu Asp Leu Ala Asn Ile His Asp
      100              105              110
Ile Gly Gly Lys Pro Ala Ser Val Ser Ala Pro Arg Glu His Pro Phe

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115	120	125
Val Leu Gln Ser Val Gly Gly Gln Thr Leu Thr Val Phe Thr Glu Ser		
130	135	140
Ser Ser Asp Lys Leu Ser Leu Glu Gly Ile Val Val Gln Arg Ala Glu		
145	150	155
Cys Arg Pro Ala Ala Ser Glu Asn Tyr Met Arg Leu Lys Arg Leu Gln		
165	170	175
Ile Glu Glu Ser Ser Lys Pro Val Arg Leu Ser Gln Gln Leu Asp Lys		
180	185	190
Val Val Thr Thr Asn Tyr Lys Pro Val Ala Asn His Gln Tyr Asn Ile		
195	200	205
Glu Tyr Glu Arg Lys Lys Lys Glu Asp Gly Lys Arg Ala Arg Ala Asp		
210	215	220
Lys Gln His Val Leu Asp Met Leu Phe Ser Ala Phe Glu Lys His Gln		
225	230	235
Tyr Tyr Asn Leu Lys Asp Leu Val Asp Ile Thr Lys Gln Pro Val Val		
245	250	255
Tyr Leu Lys Glu Ile Leu Lys Glu Ile Gly Val Gln Asn Val Lys Gly		
260	265	270
Ile His Lys Asn Thr Trp Glu Leu Lys Pro Glu Tyr Arg His Tyr Gln		
275	280	285
Gly Glu Glu Lys Ser Asp		
290	294	

<210> 3815

<211> 131

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(131)

<223> Xaa = any amino acid or nothing

<400> 3815

Asn Ile Gly Asp Trp Glu Asp Ile Gly Lys Ser Pro Glu Arg Ile Ile		
1	5	10
Gln Tyr Tyr Gly Pro Ala Thr Trp Ala Gln Asp Gly Ser Arg Gly Tyr		
20	25	30
Cys Thr Pro Ile Tyr Met Leu Asn His Ile Ile Arg Leu Gln Ala Val		
35	40	45
Leu Glu Ile Ile Met Asn Glu Arg Ala Asn Ala Leu Asp Leu Leu Ala		
50	55	60
Gln Gln Thr Thr Lys Met Arg Asn Ala Asn Tyr Gln Asn Arg Leu Ala		
65	70	75
Leu Asp Tyr Leu Leu Ala His Glu Gly Gly Val Xaa Gly Lys Phe Ser		
85	90	95
Leu Thr Asn Cys Cys Leu Glu Ile Asp Asp Asn Gly Lys Ala Ile Met		
100	105	110
Glu Ile Thr Ala Arg Met Arg Lys Leu Ala His Ile Pro Val Gln Thr		
115	120	125
Trp Glu Arg		
130 131		

<210> 3816

<211> 389

<212> PRT

<213> Homo sapiens

<400> 3816

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Ser His Trp Gln Arg Arg Asp Arg Arg Cys Val Arg Asn Met Ala Glu
 1           5           10           15
Arg Gly Arg Lys Arg Pro Cys Gly Pro Gly Glu His Gly Gln Arg Ile
      20           25           30
Glu Trp Arg Lys Trp Lys Gln Gln Lys Lys Glu Glu Lys Lys Trp
      35           40           45
Lys Asp Leu Lys Leu Met Lys Lys Leu Glu Arg Gln Arg Ala Gln Glu
      50           55           60
Glu Gln Ala Lys Arg Leu Glu Glu Glu Glu Ala Ala Ala Glu Lys Glu
      65           70           75           80
Asp Arg Gly Arg Pro Tyr Thr Leu Ser Val Ala Leu Pro Gly Ser Ile
      85           90           95
Leu Asp Asn Ala Gln Ser Pro Glu Leu Arg Thr Tyr Leu Ala Gly Gln
      100          105          110
Ile Ala Arg Ala Cys Ala Ile Phe Cys Val Asp Glu Ile Val Val Phe
      115          120          125
Asp Glu Glu Gly Gln Asp Ala Lys Thr Val Glu Gly Glu Phe Thr Gly
      130          135          140
Val Gly Lys Lys Gly Gln Ala Cys Val Gln Leu Ala Arg Ile Leu Gln
      145          150          155          160
Tyr Leu Glu Cys Pro Gln Tyr Leu Arg Lys Ala Phe Phe Pro Lys His
      165          170          175
Gln Asp Leu Gln Phe Ala Gly Leu Leu Asn Pro Leu Asp Ser Pro His
      180          185          190
His Met Arg Gln Asp Glu Glu Ser Glu Phe Arg Glu Gly Val Val Val
      195          200          205
Asp Arg Pro Thr Arg Pro Gly His Gly Ser Phe Val Asn Cys Gly Met
      210          215          220
Lys Lys Glu Val Lys Ile Asp Lys Asn Leu Glu Pro Gly Leu Arg Val
      225          230          235          240
Thr Val Arg Leu Asn Gln Gln Gln His Pro Asp Cys Lys Thr Tyr His
      245          250          255
Gly Lys Val Val Ser Ser Gln Asp Pro Arg Thr Lys Ala Gly Leu Tyr
      260          265          270
Trp Gly Tyr Thr Val Arg Leu Ala Ser Cys Leu Ser Ala Val Phe Ala
      275          280          285
Glu Ala Pro Phe Gln Asp Gly Tyr Asp Leu Thr Ile Gly Thr Ser Glu
      290          295          300
Arg Gly Ser Asp Val Ala Ser Ala Gln Leu Pro Asn Phe Arg His Ala
      305          310          315          320
Leu Val Val Phe Gly Gly Leu Gln Gly Leu Glu Ala Gly Ala Asp Ala
      325          330          335
Asp Pro Asn Leu Glu Val Ala Glu Pro Ser Val Leu Phe Asp Leu Tyr
      340          345          350
Val Asn Thr Cys Pro Gly Gln Gly Ser Arg Thr Ile Arg Thr Glu Glu
      355          360          365
Ala Ile Leu Ile Ser Leu Ala Ala Leu Gln Pro Gly Leu Ile Gln Ala
      370          375          380
Gly Ala Arg His Thr
385          389

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<210> 3817

<211> 316

<212> PRT

<213> Homo sapiens

<400> 3817

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Phe Leu Ser Ala Gly Met Ser Asn Phe Thr His Tyr Ala Tyr Leu Leu
 1           5           10           15
Met Ile Glu Ser Leu Met Leu Gly Lys Val Pro Pro His Val Pro Ser

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<210> 3818
<211> 191
<212> PRT
<213> Homo sapiens
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5576

130	135	140
Ala Asp Ser Phe Thr Phe Ser Val Glu Gln Ser Asn Leu Val Phe Asn		
145	150	155
Ile Gln Pro Ala Pro Gly Met Val Tyr Asp Tyr Tyr Glu Lys Glu Glu		160
	165	170
Tyr Ala Leu Ala Phe Tyr His Ile Asn Ser Ser Ser Val Ser Glu		175
180	185	190 191

<210> 3819

<211> 494

<212> PRT

<213> Homo sapiens

<400> 3819

Arg Ile Pro Asp Ser Ile Ile Ser Arg Gly Val Gln Gly Leu Pro Arg		
1	5	10 15
Asp Thr Ala Ser Leu Ser Thr Thr Pro Ser Glu Ser Pro Arg Ala Gln		
	20	25 30
Ala Thr Ser Arg Leu Ser Thr Ala Ser Cys Pro Thr Pro Lys Val Gln		
	35	40 45
Ser Arg Cys Ser Ser Lys Glu Asn Ile Leu Arg Ala Ser His Ser Ala		
	50	55 60
Val Asp Ile Thr Lys Val Ala Arg Arg His Arg Met Ser Pro Phe Pro		
	65	70 75 80
Leu Thr Ser Met Asp Lys Ala Phe Ile Thr Val Leu Glu Met Thr Pro		
	85	90 95
Val Leu Gly Thr Glu Ile Ile Asn Tyr Arg Asp Gly Met Gly Arg Val		
	100	105 110
Leu Ala Gln Asp Val Tyr Ala Lys Asp Asn Leu Pro Pro Phe Pro Ala		
	115	120 125
Ser Val Lys Asp Gly Tyr Ala Val Arg Ala Ala Asp Gly Pro Gly Asp		
	130	135 140
Arg Phe Ile Ile Gly Glu Ser Gln Ala Gly Glu Gln Pro Thr Gln Thr		
	145	150 155 160
Val Met Pro Gly Gln Val Met Arg Val Thr Thr Gly Ala Pro Ile Pro		
	165	170 175
Cys Gly Ala Asp Ala Val Val Gln Val Glu Asp Thr Glu Leu Ile Arg		
	180	185 190
Glu Ser Asp Asp Gly Thr Glu Glu Leu Glu Val Arg Ile Leu Val Gln		
	195	200 205
Ala Arg Pro Gly Gln Asp Ile Arg Pro Ile Gly His Asp Ile Lys Arg		
	210	215 220
Gly Glu Cys Val Leu Ala Lys Gly Thr His Met Gly Pro Ser Glu Ile		
	225	230 235 240
Gly Leu Leu Ala Thr Val Gly Val Thr Glu Val Glu Val Asn Lys Phe		
	245	250 255
Pro Val Val Ala Val Met Ser Thr Gly Asn Glu Leu Leu Asn Pro Glu		
	260	265 270
Asp Asp Leu Leu Pro Gly Lys Ile Arg Asp Ser Asn Arg Ser Thr Leu		
	275	280 285
Leu Ala Thr Ile Gln Glu His Gly Tyr Pro Thr Ile Asn Leu Gly Ile		
	290	295 300
Val Gly Asp Asn Pro Asp Asp Leu Leu Asn Ala Leu Asn Glu Gly Ile		
	305	310 315 320
Ser Arg Ala Asp Val Ile Ile Thr Ser Gly Gly Val Ser Met Gly Glu		
	325	330 335
Lys Asp Tyr Leu Lys Gln Val Leu Asp Ile Asp Leu His Ala Gln Ile		
	340	345 350
His Phe Gly Arg Val Phe Met Lys Pro Gly Leu Pro Thr Thr Phe Ala		
	355	360 365
Thr Leu Asp Ile Asp Gly Val Arg Lys Ile Ile Phe Ala Leu Pro Gly		

370	375	380
Asn Pro Val Ser Ala Val Val Thr Cys Asn Leu Phe Val Val Pro Ala		
385	390	395
Leu Arg Lys Met Gln Gly Ile Leu Asp Pro Arg Pro Thr Ile Ile Lys		400
	405	410
Ala Arg Leu Ser Cys Asp Val Lys Leu Asp Pro Arg Pro Glu Tyr His		415
	420	425
Arg Cys Ile Leu Thr Trp His His Gln Glu Pro Leu Pro Trp Ala Gln		430
	435	440
Ser Thr Gly Asn Gln Met Ser Ser Arg Leu Met Ser Met Arg Ser Ala		445
	450	455
Asn Gly Leu Leu Met Leu Pro Pro Lys Thr Glu Gln Tyr Val Glu Leu		460
465	470	475
His Lys Gly Glu Val Val Asp Val Met Val Ile Gly Arg Leu		480
	485	490
		494

<210> 3820

<211> 576

<212> PRT

<213> Homo sapiens

<400> 3820

Pro Gln Glu Pro Ala Leu Lys Ser Glu Phe Ser Gln Val Ala Ser Asn		
1	5	10
Thr Ile Pro Leu Pro Leu Pro Gln Pro Asn Thr Cys Lys Asp Asn Gly		15
	20	25
Pro Cys Lys Gln Val Cys Ser Thr Val Gly Gly Ser Ala Ile Cys Ser		30
	35	40
Cys Phe Pro Gly Tyr Ala Ile Met Ala Asp Gly Val Ser Cys Glu Asp		45
	50	55
Gln Asp Glu Cys Leu Met Gly Ala His Asp Cys Ser Arg Arg Gln Phe		60
65	70	75
Cys Val Asn Thr Leu Gly Ser Phe Tyr Cys Val Asn His Thr Val Leu		80
	85	90
Cys Ala Asp Gly Tyr Ile Leu Asn Ala His Arg Lys Cys Val Asp Ile		95
	100	105
Asn Glu Cys Val Thr Asp Leu His Thr Cys Ser Arg Gly Glu His Cys		110
	115	120
Val Asn Thr Leu Gly Ser Phe His Cys Tyr Lys Ala Leu Thr Cys Glu		125
	130	135
Pro Gly Tyr Ala Leu Lys Asp Gly Glu Cys Glu Asp Val Asp Glu Cys		140
145	150	155
Ala Met Gly Thr His Thr Cys Gln Pro Gly Phe Leu Cys Gln Asn Thr		160
	165	170
Lys Gly Ser Phe Tyr Cys Gln Ala Arg Gln Arg Cys Met Asp Gly Phe		175
	180	185
Leu Gln Asp Pro Glu Gly Asn Cys Val Asp Ile Asn Glu Cys Thr Ser		190
	195	200
Leu Ser Glu Pro Cys Arg Pro Gly Phe Ser Cys Ile Asn Thr Val Gly		205
	210	215
Ser Tyr Thr Cys Gln Arg Asn Pro Leu Ile Cys Ala Arg Gly Tyr His		220
225	230	235
Ala Ser Asp Asp Gly Thr Lys Cys Val Asp Val Asn Glu Cys Glu Thr		240
	245	250
Gly Val His Arg Cys Gly Glu Gly Gln Val Cys His Asn Leu Pro Gly		255
	260	265
Ser Tyr Arg Cys Asp Cys Lys Ala Gly Phe Gln Arg Asp Ala Phe Gly		270
	275	280
Arg Gly Cys Ile Asp Val Asn Glu Cys Trp Ala Ser Pro Gly Arg Leu		285
	290	295
Cys Gln His Thr Cys Glu Asn Thr Leu Gly Ser Tyr Arg Cys Ser Cys		300

305		310		315		320
Ala Ser Gly Phe	Leu Leu Ala Ala	Asp Gly Lys Arg	Cys Glu Asp Val			
	325		330		335	
Asn Glu Cys Glu	Ala Gln Arg Cys	Ser Gln Glu Cys	Ala Asn Ile Tyr			
	340		345		350	
Gly Ser Tyr Gln	Cys Tyr Cys Arg	Gln Gly Tyr Gln	Leu Ala Glu Asp			
	355		360		365	
Gly His Thr Cys	Thr Asp Ile Asp	Glu Cys Ala Gln	Gly Ala Gly Ile			
	370		375		380	
Leu Cys Thr Phe	Arg Cys Leu Asn	Val Pro Gly Ser	Tyr Gln Cys Ala			
	385		390		395	
Cys Pro Glu Gln	Gly Tyr Thr Met	Thr Ala Asn Gly	Arg Ser Cys Lys			
	405		410		415	
Asp Val Asp Glu	Cys Ala Leu Gly	Thr His Asn Cys	Ser Glu Ala Glu			
	420		425		430	
Thr Cys His Asn	Ile Gln Gly Ser	Phe Arg Cys Leu	Arg Phe Glu Cys			
	435		440		445	
Pro Pro Asn Tyr	Val Gln Val Ser	Lys Thr Lys Cys	Glu Arg Thr Thr			
	450		455		460	
Cys His Asp Phe	Leu Glu Cys Gln	Asn Ser Pro Ala	Arg Ile Thr His			
	465		470		475	
Tyr Gln Leu Asn	Phe Gln Thr Gly	Leu Leu Val Pro	Ala His Ile Phe			
	485		490		495	
Arg Ile Gly Pro	Ala Pro Ala Phe	Thr Gly Asp Thr	Ile Ala Leu Asn			
	500		505		510	
Ile Ile Lys Gly	Asn Glu Glu Gly	Tyr Phe Gly Thr	Arg Arg Leu Asn			
	515		520		525	
Ala Tyr Thr Gly	Val Val Tyr Leu	Gln Arg Ala Val	Leu Glu Pro Arg			
	530		535		540	
Asp Phe Ala Leu	Asp Val Glu Met	Lys Leu Trp Arg	Gln Gly Ser Val			
	545		550		555	
Thr Thr Phe Leu	Ala Lys Met His	Ile Phe Phe Thr	Thr Phe Ala Leu			
	565		570		575	576

<210> 3821
 <211> 576
 <212> PRT
 <213> Homo sapiens

<400> 3821
 Pro Gln Glu Pro Ala Leu Lys Ser Glu Phe Ser Gln Val Ala Ser Asn
 1 5 10 15
 Thr Ile Pro Leu Pro Leu Pro Gln Pro Asn Thr Cys Lys Asp Asn Gly
 20 25 30
 Pro Cys Lys Gln Val Cys Ser Thr Val Gly Gly Ser Ala Ile Cys Ser
 35 40 45
 Cys Phe Pro Gly Tyr Ala Ile Met Ala Asp Gly Val Ser Cys Glu Asp
 50 55 60
 Gln Asp Glu Cys Leu Met Gly Ala His Asp Cys Ser Arg Arg Gln Phe
 65 70 75 80
 Cys Val Asn Thr Leu Gly Ser Phe Tyr Cys Val Asn His Thr Val Leu
 85 90 95
 Cys Ala Asp Gly Tyr Ile Leu Asn Ala His Arg Lys Cys Val Asp Ile
 100 105 110
 Asn Glu Cys Val Thr Asp Leu His Thr Cys Ser Arg Gly Glu His Cys
 115 120 125
 Val Asn Thr Leu Gly Ser Phe His Cys Tyr Lys Ala Leu Thr Cys Glu
 130 135 140
 Pro Gly Tyr Ala Leu Lys Asp Gly Glu Cys Glu Asp Val Asp Glu Cys

145		150		155		160
Ala Met Gly Thr	His Thr Cys Gln Pro Gly Phe Leu Cys Gln Asn Thr					
	165		170			175
Lys Gly Ser Phe Tyr Cys Gln Ala Arg Gln Arg Cys Met Asp Gly Phe						
	180		185			190
Leu Gln Asp Pro Glu Gly Asn Cys Val Asp Ile Asn Glu Cys Thr Ser						
	195		200			205
Leu Ser Glu Pro Cys Arg Pro Gly Phe Ser Cys Ile Asn Thr Val Gly						
	210		215			220
Ser Tyr Thr Cys Gln Arg Asn Pro Leu Ile Cys Ala Arg Gly Tyr His						
	225		230			235
Ala Ser Asp Asp Gly Thr Lys Cys Val Asp Val Asn Glu Cys Glu Thr						
	245		250			255
Gly Val His Arg Cys Gly Glu Gly Gln Val Cys His Asn Leu Pro Gly						
	260		265			270
Ser Tyr Arg Cys Asp Cys Lys Ala Gly Phe Gln Arg Asp Ala Phe Gly						
	275		280			285
Arg Gly Cys Ile Asp Val Asn Glu Cys Trp Ala Ser Pro Gly Arg Leu						
	290		295			300
Cys Gln His Thr Cys Glu Asn Thr Leu Gly Ser Tyr Arg Cys Ser Cys						
	305		310			315
Ala Ser Gly Phe Leu Leu Ala Ala Asp Gly Lys Arg Cys Glu Asp Val						
	325		330			335
Asn Glu Cys Glu Ala Gln Arg Cys Ser Gln Glu Cys Ala Asn Ile Tyr						
	340		345			350
Gly Ser Tyr Gln Cys Tyr Cys Arg Gln Gly Tyr Gln Leu Ala Glu Asp						
	355		360			365
Gly His Thr Cys Thr Asp Ile Asp Glu Cys Ala Gln Gly Ala Gly Ile						
	370		375			380
Leu Cys Thr Phe Arg Cys Leu Asn Val Pro Gly Ser Tyr Gln Cys Ala						
	385		390			395
Cys Pro Glu Gln Gly Tyr Thr Met Thr Ala Asn Gly Arg Ser Cys Lys						
	405		410			415
Asp Val Asp Glu Cys Ala Leu Gly Thr His Asn Cys Ser Glu Ala Glu						
	420		425			430
Thr Cys His Asn Ile Gln Gly Ser Phe Arg Cys Leu Arg Phe Glu Cys						
	435		440			445
Pro Pro Asn Tyr Val Gln Val Ser Lys Thr Lys Cys Glu Arg Thr Thr						
	450		455			460
Cys His Asp Phe Leu Glu Cys Gln Asn Ser Pro Ala Arg Ile Thr His						
	465		470			475
Tyr Gln Leu Asn Phe Gln Thr Gly Leu Leu Val Pro Ala His Ile Phe						
	485		490			495
Arg Ile Gly Pro Ala Pro Ala Phe Thr Gly Asp Thr Ile Ala Leu Asn						
	500		505			510
Ile Ile Lys Gly Asn Glu Glu Gly Tyr Phe Gly Thr Arg Arg Leu Asn						
	515		520			525
Ala Tyr Thr Gly Val Val Tyr Leu Gln Arg Ala Val Leu Glu Pro Arg						
	530		535			540
Asp Phe Ala Leu Asp Val Glu Met Lys Leu Trp Arg Gln Gly Ser Val						
	545		550			555
Thr Thr Phe Leu Ala Lys Met His Ile Phe Phe Thr Thr Phe Ala Leu						
	565		570			575 576

<210> 3822
 <211> 321
 <212> PRT
 <213> Homo sapiens

<400> 3822

Met Ala Ala Ala Thr Arg Gly Cys Arg Pro Trp Gly Ser Leu Leu Gly
 1 5 10 15
 Leu Leu Gly Leu Val Ser Ala Ala Ala Ala Trp Asp Leu Ala Ser
 20 25 30
 Leu Arg Cys Thr Leu Gly Ala Phe Cys Glu Cys Asp Phe Arg Pro Asp
 35 40 45
 Leu Pro Gly Leu Glu Cys Asp Leu Ala Gln His Leu Ala Gly Gln His
 50 55 60
 Leu Ala Lys Ala Leu Val Val Lys Ala Leu Lys Ala Phe Val Arg Asp
 65 70 75 80
 Pro Ala Pro Thr Lys Pro Leu Val Leu Ser Leu His Gly Trp Thr Gly
 85 90 95
 Thr Gly Lys Ser Tyr Val Ser Ser Leu Leu Ala His Tyr Leu Phe Gln
 100 105 110
 Gly Gly Leu Arg Ser Pro Arg Val His His Phe Ser Pro Val Leu His
 115 120 125
 Phe Pro His Pro Ser His Ile Glu Arg Tyr Lys Lys Asp Leu Lys Ser
 130 135 140
 Trp Val Gln Gly Asn Leu Thr Ala Cys Gly Arg Ser Leu Phe Leu Phe
 145 150 155 160
 Asp Glu Met Asp Lys Met Pro Pro Gly Leu Met Glu Val Leu Arg Pro
 165 170 175
 Phe Leu Gly Ser Ser Trp Val Val Tyr Gly Thr Asn Tyr Arg Lys Ala
 180 185 190
 Ile Phe Ile Phe Ile Ser Asn Thr Gly Gly Glu Gln Ile Asn Gln Val
 195 200 205
 Ala Leu Glu Ala Trp Arg Ser Arg Arg Asp Arg Glu Glu Ile Leu Leu
 210 215 220
 Gln Glu Leu Glu Pro Val Ile Ser Arg Ala Val Leu Asp Asn Pro His
 225 230 235 240
 His Gly Phe Ser Asn Ser Gly Ile Met Glu Glu Arg Leu Leu Asp Ala
 245 250 255
 Val Val Pro Phe Leu Pro Leu Gln Arg His His Val Arg His Cys Val
 260 265 270
 Leu Asn Glu Leu Ala Gln Leu Gly Leu Glu Pro Arg Asp Glu Val Val
 275 280 285
 Gln Ala Val Leu Asp Ser Thr Thr Phe Phe Pro Glu Asp Glu Gln Leu
 290 295 300
 Phe Ser Ser Asn Gly Cys Lys Thr Val Ala Ser Arg Ile Ala Phe Phe
 305 310 315 320
 Leu
 321

<210> 3823

<211> 1058

<212> PRT

<213> Homo sapiens

<400> 3823

Tyr Gly Cys Glu Lys Thr Thr Glu Gly Arg Ile Pro Leu Lys Asn Ile
 1 5 10 15
 Tyr Arg Leu Phe Ser Ala Asp Arg Lys Arg Val Glu Thr Ala Leu Glu
 20 25 30
 Ala Cys Ser Leu Pro Ser Ser Arg Asn Asp Ser Ile Pro Gln Glu Asp
 35 40 45
 Phe Thr Pro Glu Val Tyr Arg Val Phe Leu Asn Asn Leu Cys Pro Arg
 50 55 60
 Pro Glu Ile Asp Asn Ile Phe Ser Glu Phe Gly Ala Lys Ser Lys Pro
 65 70 75 80
 Tyr Leu Thr Val Asp Gln Met Met Asp Phe Ile Asn Leu Lys Gln Arg

85										90					95				
Asp	Pro	Arg	Leu	Asn	Glu	Ile	Leu	Tyr	Pro	Pro	Leu	Lys	Gln	Glu	Gln				
			100					105					110						
Val	Gln	Val	Leu	Ile	Glu	Lys	Tyr	Glu	Pro	Asn	Asn	Ser	Leu	Ala	Arg				
		115					120					125							
Lys	Gly	Gln	Ile	Ser	Val	Asp	Gly	Phe	Met	Arg	Tyr	Leu	Ser	Gly	Glu				
	130					135					140								
Glu	Asn	Gly	Val	Val	Ser	Pro	Glu	Lys	Leu	Asp	Leu	Asn	Glu	Asp	Met				
145					150					155					160				
Ser	Gln	Pro	Leu	Ser	His	Tyr	Phe	Ile	Asn	Ser	Ser	His	Asn	Thr	Tyr				
			165						170					175					
Leu	Thr	Ala	Gly	Gln	Leu	Ala	Gly	Asn	Ser	Ser	Val	Glu	Met	Tyr	Arg				
		180						185					190						
Gln	Val	Leu	Leu	Ser	Gly	Cys	Arg	Cys	Val	Glu	Leu	Asp	Cys	Trp	Lys				
	195					200						205							
Gly	Arg	Thr	Ala	Glu	Glu	Glu	Pro	Val	Ile	Thr	His	Gly	Phe	Thr	Met				
210					215					220									
Thr	Thr	Glu	Ile	Ser	Phe	Lys	Glu	Val	Ile	Glu	Ala	Ile	Ala	Glu	Cys				
225				230					235					240					
Ala	Phe	Lys	Thr	Ser	Pro	Phe	Pro	Ile	Leu	Leu	Ser	Phe	Glu	Asn	His				
			245						250					255					
Val	Asp	Ser	Pro	Lys	Gln	Gln	Ala	Lys	Met	Ala	Glu	Tyr	Cys	Arg	Leu				
		260						265					270						
Ile	Phe	Gly	Asp	Ala	Leu	Leu	Met	Glu	Pro	Leu	Glu	Lys	Tyr	Pro	Leu				
	275					280						285							
Glu	Ser	Gly	Val	Pro	Leu	Pro	Ser	Pro	Met	Asp	Leu	Met	Tyr	Lys	Ile				
290					295					300									
Leu	Val	Lys	Asn	Lys	Lys	Lys	Ser	His	Lys	Ser	Ser	Glu	Gly	Ser	Gly				
305				310						315				320					
Lys	Lys	Lys	Leu	Ser	Glu	Gln	Ala	Ser	Asn	Thr	Tyr	Ser	Asp	Ser	Ser				
			325					330					335						
Ser	Met	Phe	Glu	Pro	Ser	Ser	Pro	Gly	Ala	Gly	Glu	Ala	Asp	Thr	Glu				
		340						345					350						
Ser	Asp	Asp	Asp	Asp	Asp	Asp	Asp	Asp	Cys	Lys	Lys	Ser	Ser	Met	Asp				
	355					360						365							
Glu	Gly	Thr	Ala	Gly	Ser	Glu	Ala	Met	Ala	Thr	Glu	Glu	Met	Ser	Asn				
370					375						380								
Leu	Val	Asn	Tyr	Ile	Gln	Pro	Val	Lys	Phe	Glu	Ser	Phe	Glu	Ile	Ser				
385					390					395				400					
Lys	Lys	Arg	Asn	Lys	Ser	Phe	Glu	Met	Ser	Ser	Phe	Val	Glu	Thr	Lys				
			405						410					415					
Gly	Leu	Glu	Gln	Leu	Thr	Lys	Ser	Pro	Val	Glu	Phe	Val	Glu	Tyr	Asn				
		420						425					430						
Lys	Met	Gln	Leu	Ser	Arg	Ile	Tyr	Pro	Lys	Gly	Thr	Arg	Val	Asp	Ser				
	435					440					445								
Ser	Asn	Tyr	Met	Pro	Gln	Leu	Phe	Trp	Asn	Ala	Gly	Cys	Gln	Met	Val				
450					455					460									
Ala	Leu	Asn	Phe	Gln	Thr	Met	Asp	Leu	Ala	Met	Gln	Ile	Asn	Met	Gly				
465				470						475				480					
Met	Tyr	Glu	Tyr	Asn	Gly	Lys	Ser	Gly	Tyr	Arg	Leu	Lys	Pro	Glu	Phe				
			485					490						495					
Met	Arg	Arg	Pro	Asp	Lys	His	Phe	Asp	Pro	Phe	Thr	Glu	Gly	Ile	Val				
		500						505					510						
Asp	Gly	Ile	Val	Ala	Asn	Thr	Leu	Ser	Val	Lys	Ile	Ile	Ser	Gly	Gln				
	515					520						525							
Phe	Leu	Ser	Asp	Lys	Lys	Val	Gly	Thr	Tyr	Val	Glu	Val	Asp	Met	Phe				
	530					535					540								
Gly	Leu	Pro	Val	Asp	Thr	Arg	Arg	Lys	Ala	Phe	Lys	Thr	Lys	Thr	Ser				
545				550					555					560					
Gln	Gly	Asn	Ala	Val	Asn	Pro	Val	Trp	Glu	Glu	Glu	Pro	Ile	Val	Phe				
		565						570					575						
Lys	Lys	Val	Val	Leu	Pro	Thr	Leu	Ala	Cys	Leu	Arg	Ile	Ala	Val	Tyr				
		580						585					590						
Glu	Glu	Gly	Gly	Lys	Phe	Ile	Gly	His	Arg	Ile	Leu	Pro	Val	Gln	Ala				

595	600	605
Ile Arg Pro Gly Tyr His Tyr	Ile Cys Leu Arg Asn Glu Arg Asn Gln	
610	615	620
Pro Leu Thr Leu Pro Ala Val Phe Val Tyr	Ile Glu Val Lys Asp Tyr	
625	630	635
Val Pro Asp Thr Tyr Ala Asp Val	Ile Glu Ala Leu Ser Asn Pro Ile	
645	650	655
Arg Tyr Val Asn Leu Met Glu Gln Arg Ala Lys Gln Leu Ala Ala Leu		
660	665	670
Thr Leu Glu Asp Glu Glu Glu Val Lys Lys Glu Ala Asp Pro Gly Glu		
675	680	685
Thr Pro Ser Glu Ala Pro Ser Glu Ala Arg Thr Thr Pro Ala Glu Asn		
690	695	700
Gly Val Asn His Thr Thr Thr Leu Thr Pro Lys Pro Pro Ser Gln Ala		
705	710	715
Leu His Ser Gln Pro Ala Pro Gly Ser Val Lys Ala Pro Ala Lys Thr		
725	730	735
Glu Asp Leu Ile Gln Ser Val Leu Thr Glu Val Glu Ala Gln Thr Ile		
740	745	750
Glu Glu Leu Lys Gln Gln Lys Ser Phe Val Lys Leu Gln Lys Lys His		
755	760	765
Tyr Lys Glu Met Lys Asp Leu Val Lys Arg His His Lys Lys Thr Thr		
770	775	780
Asp Leu Ile Lys Glu His Thr Thr Lys Tyr Asn Glu Ile Gln Asn Asp		
785	790	795
Tyr Leu Arg Arg Arg Ala Ala Leu Glu Lys Ser Ala Lys Lys Asp Ser		
805	810	815
Lys Lys Lys Ser Glu Pro Ser Ser Pro Asp His Gly Ser Ser Thr Ile		
820	825	830
Glu Gln Asp Leu Ala Ala Leu Asp Ala Glu Met Thr Gln Lys Leu Ile		
835	840	845
Asp Leu Lys Asp Lys Gln Gln Gln Gln Leu Leu Asn Leu Arg Gln Glu		
850	855	860
Gln Tyr Tyr Ser Glu Lys Tyr Gln Lys Arg Glu His Ile Lys Leu Leu		
865	870	875
Ile Gln Lys Leu Thr Asp Val Ala Glu Glu Cys Gln Asn Asn Gln Leu		
885	890	895
Lys Lys Leu Lys Glu Ile Cys Glu Lys Glu Lys Lys Glu Leu Lys Lys		
900	905	910
Lys Met Asp Lys Lys Arg Gln Glu Lys Ile Thr Glu Ala Lys Ser Lys		
915	920	925
Asp Lys Ser Gln Met Glu Glu Glu Lys Thr Glu Met Ile Arg Ser Tyr		
930	935	940
Ile Gln Glu Val Val Gln Tyr Ile Lys Arg Leu Glu Glu Ala Gln Ser		
945	950	955
Lys Arg Gln Glu Lys Leu Val Glu Lys His Lys Glu Ile Arg Gln Gln		
965	970	975
Ile Leu Asp Glu Lys Pro Lys Leu Gln Val Glu Leu Glu Gln Glu Tyr		
980	985	990
Gln Asp Lys Phe Lys Arg Leu Pro Leu Glu Ile Leu Glu Phe Val Gln		
995	1000	1005
Glu Ala Met Lys Gly Lys Ile Ser Glu Asp Ser Asn His Gly Ser Ala		
1010	1015	1020
Pro Leu Ser Leu Ser Ser Asp Pro Gly Lys Val Asn His Lys Thr Pro		
1025	1030	1035
Ser Ser Glu Glu Leu Gly Gly Asp Ile Pro Gly Lys Glu Phe Asp Thr		
1045	1050	1055
Pro Leu		
1058		

<210> 3824

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3824

```

Ile Leu His Trp Phe Val His Arg Trp Ser Gly Arg Asn Asn Arg Glu
 1          5          10          15
Lys Ile Gly Val His Val Gly Phe Glu Glu Ile Leu Asn Met Glu Pro
          20          25          30
Tyr Cys Cys Arg Glu Thr Leu Lys Ser Leu Arg Pro Glu Cys Phe Ile
          35          40          45
Tyr Asp Leu Ser Ala Val Val Met His His Gly Lys Gly Phe Gly Ser
          50          55          60
Gly His Tyr Thr Ala Tyr Cys Tyr Asn Ser Glu Gly Gly Phe Trp Val
          65          70          75          80
His Cys Asn Asp Ser Lys Leu Ser Met Cys Thr Met Asp Glu Val Cys
          85          90          95
Lys Ala Gln Ala Tyr Ile Leu Phe Tyr Thr Gln Arg Val Thr Glu Asn
          100          105          110
Gly His Ser Lys Leu Leu Pro Pro Glu Leu Leu Leu Gly Ser Gln His
          115          120          125
Pro Asn Glu Asp Ala Asp Thr Ser Ser Asn Glu Ile Leu Ser
          130          135          140          142

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<210> 3825

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3825

```

Gly Ile Arg Ala Lys Phe Pro Asn Lys Ile Pro Val Val Val Glu Arg
 1          5          10          15
Tyr Pro Arg Glu Thr Phe Leu Pro Pro Leu Asp Lys Thr Lys Phe Leu
          20          25          30
Val Pro Gln Glu Leu Thr Met Thr Gln Phe Leu Ser Ile Ile Arg Ser
          35          40          45
Arg Met Val Leu Arg Ala Thr Glu Ala Phe Tyr Leu Leu Val Asn Asn
          50          55          60
Lys Ser Leu Val Ser Met Ser Ala Thr Met Ala Glu Ile Tyr Arg Asp
          65          70          75          80
Tyr Lys Asp Glu Asp Gly Phe Val Tyr Met Thr Tyr Ala Ser Gln Glu
          85          90          95
Thr Phe Gly Cys Leu Glu Ser Ala Ala Pro Arg Asp Gly Ser Ser Leu
          100          105          110
Glu Asp Arg Pro Leu His Pro Leu
          115          120

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<210> 3826

<211> 412

<212> PRT

<213> Homo sapiens

<400> 3826

```

Pro Glu Lys Lys Phe Glu Arg Glu Cys Arg Glu Ala Glu Lys Ala Gln
 1          5          10          15
Gln Ser Tyr Glu Arg Leu Asp Asn Asp Thr Asn Ala Thr Lys Ala Asp
          20          25          30
Val Glu Lys Ala Lys Gln Gln Leu Asn Leu Arg Thr His Met Ala Asp

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      35      40      45
Glu Asn Lys Asn Glu Tyr Ala Ala Gln Leu Gln Asn Phe Asn Gly Glu
      50      55      60
Gln His Lys His Phe Tyr Val Val Ile Pro Gln Ile Tyr Lys Gln Leu
      65      70      75      80
Gln Glu Met Asp Glu Arg Arg Thr Ile Lys Leu Ser Glu Cys Tyr Arg
      85      90      95
Gly Phe Ala Asp Ser Glu Arg Lys Val Ile Pro Ile Ile Ser Lys Cys
      100      105      110
Leu Glu Gly Met Ile Leu Ala Ala Lys Ser Val Asp Glu Arg Arg Asp
      115      120      125
Ser Gln Met Val Val Asp Ser Phe Lys Ser Gly Phe Glu Pro Pro Gly
      130      135      140
Asp Phe Pro Phe Glu Asp Tyr Ser Gln His Ile Tyr Arg Thr Ile Ser
      145      150      155      160
Asp Gly Thr Ile Ser Ala Ser Lys Gln Glu Ser Gly Lys Met Asp Ala
      165      170      175
Lys Thr Thr Val Gly Lys Ala Lys Gly Lys Leu Trp Leu Phe Gly Lys
      180      185      190
Lys Pro Lys Gly Pro Ala Leu Glu Asp Phe Ser His Leu Pro Pro Glu
      195      200      205
Gln Arg Arg Lys Lys Leu Gln Gln Arg Ile Asp Glu Leu Asn Arg Glu
      210      215      220
Leu Gln Lys Glu Ser Asp Gln Lys Asp Ala Leu Asn Lys Met Lys Asp
      225      230      235      240
Val Tyr Glu Lys Asn Pro Gln Met Gly Asp Pro Gly Ser Leu Gln Pro
      245      250      255
Lys Leu Ala Glu Thr Met Asn Asn Ile Asp Arg Leu Arg Met Glu Ile
      260      265      270
His Lys Asn Glu Ala Trp Leu Ser Glu Val Glu Gly Lys Thr Gly Gly
      275      280      285
Arg Gly Asp Arg Arg His Ser Ser Asp Ile Asn His Leu Val Thr Gln
      290      295      300
Gly Arg Glu Ser Pro Glu Gly Ser Tyr Thr Asp Asp Ala Asn Gln Glu
      305      310      315      320
Val Arg Gly Pro Pro Gln Gln His Gly His His Asn Glu Phe Asp Asp
      325      330      335
Glu Phe Glu Asp Asp Asp Pro Leu Pro Ala Ile Gly His Cys Lys Ala
      340      345      350
Ile Tyr Pro Phe Asp Gly His Asn Glu Gly Thr Leu Ala Met Lys Glu
      355      360      365
Gly Glu Val Leu Tyr Ile Ile Glu Glu Asp Lys Gly Asp Gly Trp Thr
      370      375      380
Arg Ala Arg Arg Gln Asn Gly Glu Glu Gly Tyr Val Pro Thr Ser Tyr
      385      390      395      400
Ile Asp Val Thr Leu Glu Lys Asn Ser Lys Gly Ser
      405      410      412

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<210> 3827

<211> 527

<212> PRT

<213> Homo sapiens

<400> 3827

```

Ile Asn Pro Val Ser Ser Ala Val Asn Gly Glu Ala His Ser Ser His
  1      5      10      15
Glu Thr Arg Gly Gln Asn Ser Asn Ala Leu Pro Ser Val Leu Leu Glu
      20      25      30
Leu Leu Ser Gln Ser Cys Leu Ile Pro Ala Met Ser Ser Tyr Leu Arg
      35      40      45
Asn Asp Ser Val Leu Asp Met Ala Arg His Val Pro Leu Tyr Arg Ala

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PCT/US01/04098

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<210> 3828
<211> 190
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<212> PRT

<213> Homo sapiens

<400> 3828

```

Pro Arg Val Pro Ala Thr Leu Val Ser Leu Asp Pro Trp His Cys Phe
 1           5           10           15
Pro Thr Ala Gly Arg Leu Ala Gly Ser Thr Trp Val Pro Pro Ala Cys
           20           25           30
Thr Leu Gln Leu Gly Pro Ser Ser Glu His Glu Leu Asp Asn His Arg
           35           40           45
Ala Pro Leu Leu Ser Leu Pro Ser Gln Glu Ser Leu Ser Phe Thr Pro
           50           55           60
Trp Tyr Leu Val Ala Cys Lys Pro Leu Phe His Ile Phe Cys Pro Leu
           65           70           75           80
Phe Ala Cys Phe Met Gln Glu Gly Lys Val Gln Tyr Leu Phe Leu His
           85           90           95
Leu Ser His Met Arg Leu Leu Asn Tyr Tyr Phe Phe Pro Phe Leu Ala
           100          105          110
Pro Glu Ser Leu Met Gln Ala Leu Glu Asp Leu Asp Tyr Leu Ala Ala
           115          120          125
Leu Asp Asn Asp Gly Asn Leu Ser Glu Phe Gly Ile Ile Met Ser Glu
           130          135          140
Phe Pro Leu Asp Pro Gln Leu Ser Lys Ser Ile Leu Ala Ser Cys Glu
           145          150          155          160
Phe Asp Cys Val Asp Glu Val Leu Thr Ile Ala Ala Met Val Thr Gly
           165          170          175
Ile Leu Asn Asp Tyr Ser Phe Ser Phe Phe Ala Asn Leu His
           180          185          190

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<210> 3829

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3829

```

Val Asp His Thr Pro Val Leu Ser Lys Pro Gln Cys Phe Ser Ser Val
 1           5           10           15
Lys Trp Gly Ala Thr Leu Ser Ala Arg Ser Gln Lys Thr Ser Gly Ile
           20           25           30
Gly Arg Leu Met Val His Val Ile Glu Ala Thr Glu Leu Lys Ala Cys
           35           40           45
Lys Pro Asn Gly Lys Ser Asn Pro Tyr Cys Glu Ile Ser Met Gly Ser
           50           55           60
Gln Ser Tyr Thr Thr Arg Thr Ile Gln Asp Thr Leu Asn Pro Lys Trp
           65           70           75           80
Asn Phe Asn Cys Gln Phe Phe Ile Lys Asp Leu Tyr Gln Asp Val Leu
           85           90           95
Cys Leu Thr Leu Phe Asp Arg Asp Gln Phe Ser Pro Asp Asp Phe Leu
           100          105          110
Gly Arg Thr Glu Ile Pro Val Ala Lys Ile Arg Thr Glu Gln Glu Ser
           115          120          125
Lys Gly Pro Met Thr Arg Arg Leu Leu Leu His Glu Val Pro Thr Gly
           130          135          140
Glu Val Trp Val Arg Phe Asp Leu Gln Leu Phe Glu Gln Lys Thr Leu
           145          150          155          160
Leu
161

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<210> 3830
 <211> 447
 <212> PRT
 <213> Homo sapiens

<400> 3830
 Arg Lys Met Met Glu Glu Ser Gly Ile Glu Thr Thr Pro Pro Gly Thr
 1 5 10 15
 Pro Pro Pro Asn Pro Ala Gly Leu Ala Ala Thr Ala Met Ser Ser Thr
 20 25 30
 Pro Val Pro Leu Ala Ala Thr Ser Ser Phe Ser Ser Pro Asn Val Ser
 35 40 45
 Ser Met Glu Ser Phe Pro Pro Leu Ala Tyr Ser Thr Pro Gln Pro Pro
 50 55 60
 Leu Pro Pro Val Arg Pro Ser Ala Pro Leu Pro Phe Val Pro Pro Pro
 65 70 75 80
 Ala Val Pro Ser Val Pro Pro Leu Val Thr Ser Met Pro Pro Pro Val
 85 90 95
 Ser Pro Ser Thr Ala Ala Ala Phe Gly Asn Pro Pro Val Ser His Phe
 100 105 110
 Pro Pro Ser Thr Ser Ala Pro Asn Thr Leu Leu Pro Ala Pro Pro Ser
 115 120 125
 Gly Pro Pro Ile Ser Gly Phe Ser Val Gly Ser Thr Tyr Asp Ile Thr
 130 135 140
 Arg Gly His Ala Gly Arg Ala Pro Gln Thr Pro Leu Met Pro Ser Phe
 145 150 155 160
 Ser Ala Pro Ser Gly Thr Gly Leu Leu Pro Thr Pro Ile Thr Gln Gln
 165 170 175
 Ala Ser Leu Thr Ser Leu Ala Gln Gly Thr Gly Thr Thr Ser Ala Ile
 180 185 190
 Thr Phe Pro Glu Glu Gln Glu Asp Pro Arg Ile Thr Arg Gly Gln Asp
 195 200 205
 Glu Ala Ser Ala Gly Gly Ile Trp Gly Phe Ile Lys Gly Val Ala Gly
 210 215 220
 Asn Pro Met Val Lys Ser Val Leu Asp Lys Thr Lys His Ser Val Glu
 225 230 235 240
 Ser Met Ile Thr Thr Leu Asp Pro Gly Met Ala Pro Tyr Ile Lys Ser
 245 250 255
 Gly Gly Glu Leu Asp Ile Val Val Thr Ser Asn Lys Glu Val Lys Val
 260 265 270
 Ala Ala Val Arg Asp Ala Phe Gln Glu Val Phe Gly Leu Ala Val Val
 275 280 285
 Val Gly Glu Ala Gly Gln Ser Asn Ile Ala Pro Gln Pro Val Gly Tyr
 290 295 300
 Ala Ala Gly Leu Lys Gly Ala Gln Glu Arg Ile Asp Ser Leu Arg Arg
 305 310 315 320
 Thr Gly Val Ile His Glu Lys Gln Thr Ala Val Ser Val Glu Asn Phe
 325 330 335
 Ile Ala Glu Leu Leu Pro Asp Lys Trp Phe Asp Ile Gly Cys Leu Val
 340 345 350
 Val Glu Asp Pro Val His Gly Ile His Leu Glu Thr Phe Thr Gln Ala
 355 360 365
 Thr Pro Val Pro Leu Glu Phe Val Gln Gln Ala Gln Ser Leu Thr Pro
 370 375 380
 Gln Asp Tyr Asn Leu Arg Trp Ser Gly Leu Leu Val Thr Val Gly Glu
 385 390 395 400
 Val Leu Glu Lys Ser Leu Leu Asn Val Ser Arg Thr Asp Trp His Met
 405 410 415
 Ala Phe Thr Gly Met Ser Arg Arg Gln Met Ile Tyr Ser Ala Ala Arg
 420 425 430
 Ala Ile Ala Gly Met Tyr Lys Gln Arg Leu Pro Pro Arg Thr Val
 435 440 445 447

<210> 3831
 <211> 223
 <212> PRT
 <213> Homo sapiens

<400> 3831
 Phe Trp Thr Arg Ser Ala Trp His Glu Gly Leu Gln Gln Met Lys Ala
 1 5 10 15
 Asn Asp Pro Ser Leu Gln Glu Val Asn Leu Tyr Asn Ile Lys Asn Ile
 20 25 30
 Pro Ile Pro Thr Leu Arg Glu Phe Ala Lys Ala Leu Glu Thr Asn Thr
 35 40 45
 His Val Lys Lys Phe Ser Leu Ala Ala Thr Arg Ser Asn Asp Pro Val
 50 55 60
 Ala Ile Ala Phe Ala Asp Met Leu Lys Val Asn Thr Thr Leu Thr Ser
 65 70 75 80
 Leu Asn Ile Glu Ser His Phe Ile Thr Gly Thr Gly Ile Leu Ala Leu
 85 90 95
 Val Glu Ala Leu Lys Glu Asn Asp Thr Leu Thr Glu Ile Lys Ile Asp
 100 105 110
 Asn Gln Arg Gln Gln Leu Gly Thr Ala Val Glu Met Glu Ile Ala Gln
 115 120 125
 Met Leu Glu Glu Asn Ser Arg Ile Leu Lys Phe Gly Tyr Gln Phe Thr
 130 135 140
 Lys Gln Gly Pro Arg Thr Arg Val Ala Ala Ala Ile Thr Lys Asn Asn
 145 150 155 160
 Asp Leu Ala Trp Gln Lys Asp Thr Gln Glu Gln Thr Ser Ile Trp Gln
 165 170 175
 Val Val Ser Gln Ser Ile Ala Gly Phe Asn Pro Gln Phe Glu Val Gln
 180 185 190
 Gly Gln Asn Ala Arg Ser Trp Met Glu Glu Leu Gly Lys Ala Phe His
 195 200 205
 Gln Phe Val Arg Arg Glu Leu Lys Gln Thr Glu Gly Lys Leu Pro
 210 215 220 223

<210> 3832
 <211> 206
 <212> PRT
 <213> Homo sapiens

<400> 3832
 Glu Pro Trp Val Pro Met Asp Val Ala Glu Ser Pro Glu Arg Asp Pro
 1 5 10 15
 His Ser Pro Glu Asp Glu Glu Gln Pro Gln Gly Leu Ser Asp Asp Asp
 20 25 30
 Ile Leu Arg Asp Ser Gly Ser Asp Gln Asp Leu Asp Gly Ala Gly Val
 35 40 45
 Arg Ala Ser Asp Leu Glu Asp Glu Glu Ser Ala Ala Arg Gly Pro Ser
 50 55 60
 Gln Glu Glu Glu Asp Asn His Ser Asp Glu Glu Asp Arg Ala Ser Glu
 65 70 75 80
 Pro Lys Ser Gln Asp Gln Asp Ser Glu Val Asn Glu Leu Ser Arg Gly
 85 90 95
 Pro Thr Ser Ser Pro Cys Glu Glu Glu Gly Asp Glu Gly Glu Glu Asp
 100 105 110
 Arg Thr Ser Asp Leu Arg Asp Glu Ala Ser Ser Val Thr Arg Glu Leu
 115 120 125
 Asp Glu His Glu Leu Asp Tyr Asp Glu Glu Val Pro Glu Glu Pro Ala

130	135	140
Pro Ala Val Gln Glu Asp	Glu Ala Glu Lys Ala Gly Ala Glu Asp Asp	
145	150	155
Glu Glu Lys Gly Glu Gly Thr Pro Arg	Glu Glu Gly Lys Ala Gly Val	160
	165	170
Gln Ser Val Gly Glu Lys Glu Ser Leu	Glu Ala Ala Lys Glu Lys Lys	175
	180	185
Lys Glu Asp Asp Asp Gly Glu Ile Asp	Asp Glu Glu Met Tyr	190
	195	200
		205 206

<210> 3833

<211> 518

<212> PRT

<213> Homo sapiens

<400> 3833

Ser Gln Pro Pro His Phe Thr Gln Lys Met Asn Glu Asn Lys Asp Thr	
1	5
Asp Ser Lys Lys Ser Glu Glu Tyr Glu Asp Asp Phe Glu Lys Asp Leu	10
	20
Glu Trp Leu Ile Asn Glu Asn Glu Lys Ser Asp Ala Ser Ile Ile Glu	25
	30
Met Ala Cys Glu Lys Glu Glu Asn Ile Asn Gln Asp Leu Lys Glu Asn	35
	40
Glu Thr Val Met Glu His Thr Lys Arg His Ser Asp Pro Asp Lys Ser	45
	50
Leu Gln Asp Glu Val Ser Pro Arg Arg Asn Asp Ile Ile Ser Val Pro	55
	60
Gly Ile Gln Pro Leu Asp Pro Ile Ser Asp Ser Asp Ser Glu Asn Ser	65
	70
Phe Gln Glu Ser Lys Leu Glu Ser Gln Lys Asp Leu Glu Glu Glu	75
	80
Asp Glu Glu Val Arg Arg Tyr Ile Met Glu Lys Ile Val Gln Ala Asn	85
	90
Lys Leu Leu Gln Asn Gln Glu Pro Val Asn Asp Lys Arg Glu Arg Lys	95
	100
Leu Lys Phe Lys Asp Gln Leu Val Asp Leu Glu Val Pro Pro Leu Glu	105
	110
Asp Thr Thr Thr Ser Lys Asn Tyr Phe Glu Asn Glu Arg Asn Met Phe	115
	120
Gly Lys Leu Ser Gln Leu Cys Ile Ser Asn Asp Phe Gly Gln Glu Asp	125
	130
Val Leu Leu Ser Leu Thr Asn Gly Ser Cys Glu Glu Asn Lys Asp Arg	135
	140
Thr Ile Leu Val Glu Arg Asp Gly Lys Phe Glu Leu Leu Asn Leu Gln	145
	150
Asp Ile Ala Ser Gln Gly Phe Leu Pro Pro Ile Asn Asn Ala Asn Ser	155
	160
Thr Glu Asn Asp Pro Gln Gln Leu Leu Pro Arg Ser Ser Asn Ser Ser	165
	170
Val Ser Gly Thr Lys Lys Glu Asp Ser Thr Ala Lys Ile His Ala Val	175
	180
Thr His Ser Ser Thr Gly Glu Pro Leu Ala Tyr Ile Ala Gln Pro Pro	185
	190
Leu Asn Arg Lys Thr Cys Pro Ser Ser Ala Val Asn Ser Asp Arg Ser	195
	200
Lys Gly Asn Gly Lys Ser Asn His Arg Thr Gln Ser Ala His Ile Ser	205
	210
Pro Val Thr Ser Thr Tyr Cys Leu Ser Pro Arg Gln Lys Glu Leu Gln	215
	220
Lys Gln Leu Glu Glu Lys Arg Glu Lys Leu Lys Arg Glu Glu Arg	225
	230
	235
	240
	245
	250
	255
	260
	265
	270
	275
	280
	285
	290
	295
	300
	305
	310
	315
	320
	325
	330
	335
	340
	345
	350

355 360 365
 Arg Lys Ile Glu Glu Glu Lys Glu Lys Lys Arg Glu Asn Asp Ile Val
 370 375 380
 Phe Lys Ala Trp Leu Gln Lys Lys Arg Glu Gln Val Leu Glu Met Arg
 385 390 395 400
 Arg Ile Gln Arg Ala Lys Glu Ile Glu Asp Met Asn Ser Arg Gln Glu
 405 410 415
 Asn Arg Asp Pro Gln Gln Ala Phe Arg Leu Trp Leu Lys Lys Lys His
 420 425 430
 Glu Glu Gln Met Lys Glu Arg Gln Thr Glu Glu Leu Arg Lys Gln Glu
 435 440 445
 Glu Cys Leu Phe Phe Leu Lys Gly Thr Glu Gly Arg Glu Arg Ala Phe
 450 455 460
 Lys Gln Trp Leu Arg Arg Lys Arg Met Glu Lys Met Ala Glu Gln Gln
 465 470 475 480
 Ala Val Arg Glu Arg Thr Arg Gln Leu Arg Leu Glu Ala Lys Arg Ser
 485 490 495
 Lys Gln Leu Gln His His Leu Tyr Met Ser Glu Ala Lys Pro Phe Arg
 500 505 510
 Phe Thr Asp His Tyr Asn
 515 518

<210> 3834
 <211> 66
 <212> PRT
 <213> Homo sapiens

<400> 3834
 Arg Ser Arg Thr Glu Glu Leu Ser Asn Ser Gly Ile Leu Lys Ala Met
 1 5 10 15
 Ser Lys Asp Leu Val Thr Phe Gly Asp Val Ala Val Asn Phe Ser Gln
 20 25 30
 Glu Glu Trp Glu Trp Leu Asn Pro Ala Gln Arg Asn Leu Tyr Arg Lys
 35 40 45
 Val Met Leu Glu Asn Tyr Arg Ser Leu Val Ser Leu Gly Lys Asp Met
 50 55 60
 Ser Pro
 65 66

<210> 3835
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 3835
 Ala Ser Asp Phe Tyr Leu Arg Tyr Tyr Val Gly His Lys Gly Lys Phe
 1 5 10 15
 Gly His Glu Phe Leu Glu Phe Glu Phe Arg Pro Asp Gly Val Tyr Val
 20 25 30 32

<210> 3836
 <211> 219
 <212> PRT
 <213> Homo sapiens

<400> 3836

```

Arg Pro Thr Pro Gly His Gly Asp Phe Trp Met Gln Pro Leu Thr Lys
 1          5          10          15
Asp Ala Gly Met Ser Leu Ser Ser Val Thr Leu Ala Ser Ala Leu Gln
          20          25          30
Val Arg Gly Glu Ala Leu Ser Glu Glu Glu Ile Trp Ser Leu Leu Phe
          35          40          45
Leu Ala Ala Glu Gln Leu Leu Glu Asp Leu Arg Asn Asp Ser Ser Asp
          50          55          60
Tyr Val Val Cys Pro Trp Ser Ala Leu Leu Ser Ala Ala Gly Ser Leu
          65          70          75          80
Ser Phe Gln Gly Arg Val Ser His Ile Glu Ala Ala Pro Phe Lys Ala
          85          90          95
Pro Glu Leu Leu Gln Gly Gln Ser Glu Asp Glu Gln Pro Asp Ala Ser
          100          105          110
Gln Met His Val Tyr Ser Leu Gly Met Thr Leu Tyr Trp Ser Ala Gly
          115          120          125
Phe His Val Pro Pro His Gln Pro Leu Gln Leu Cys Glu Pro Leu His
          130          135          140
Ser Ile Leu Leu Thr Met Cys Glu Asp Gln Pro His Arg Arg Cys Thr
          145          150          155          160
Leu Gln Ser Val Leu Glu Ala Cys Arg Val His Glu Lys Glu Val Ser
          165          170          175
Val Tyr Pro Ala Pro Ala Gly Leu His Ile Arg Arg Leu Val Gly Leu
          180          185          190
Val Leu Gly Thr Ile Ser Glu Val Ser Arg Glu Pro Cys Phe Ser Ser
          195          200          205
Ser Ser Cys Trp Ser Cys Val Ala Ile Lys Ile
          210          215          219

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<210> 3837

<211> 403

<212> PRT

<213> Homo sapiens

<400> 3837

```

Ser Leu Gly Cys Thr Asn Ser Ala Arg Gly Lys Gly Gln Asp Asp Glu
 1          5          10          15
Val Arg Thr Leu Met Ala Asn Gly Ala Pro Phe Thr Thr Asp Trp Phe
          20          25          30
Ser Lys Leu Arg Val Ser Cys Gly Tyr Ile Gly Asp Asn Cys Lys Asn
          35          40          45
Gly Ala Asp Val Asn Ala Lys Asp Met Leu Lys Met Thr Ala Leu His
          50          55          60
Trp Ala Thr Glu Arg His His Arg Asp Val Val Glu Leu Leu Ile Lys
          65          70          75          80
Tyr Gly Ala Asp Val His Ala Phe Ser Lys Phe Asp Lys Ser Ala Phe
          85          90          95
Asp Ile Ala Leu Glu Lys Asn Asn Ala Glu Ile Leu Val Ile Leu Gln
          100          105          110
Glu Ala Met Gln Asn Gln Val Asn Val Asn Pro Glu Arg Ala Asn Pro
          115          120          125
Val Thr Asp Pro Val Ser Met Ala Ala Pro Phe Ile Phe Thr Ser Gly
          130          135          140
Glu Val Val Asn Leu Ala Ser Leu Ile Ser Ser Thr Asn Thr Lys Thr
          145          150          155          160
Thr Ser Gly Asp Pro His Ala Ser Thr Val Gln Phe Ser Asn Ser Thr
          165          170          175
Thr Ser Val Leu Ala Thr Leu Ala Ala Leu Ala Glu Ala Ser Val Pro

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```

      180      185      190
Leu Ser Asn Ser His Arg Ala Thr Ala Asn Thr Glu Glu Ile Ile Glu
      195      200      205
Gly Asn Ser Val Asp Ser Ser Ile Gln Gln Val Met Gly Ser Gly Gly
      210      215      220
Gln Arg Val Ile Thr Ile Val Thr Asp Gly Val Pro Leu Gly Asn Ile
      225      230      235      240
Gln Thr Ser Ile Pro Thr Gly Gly Ile Gly His Pro Phe Ile Val Thr
      245      250      255
Val Gln Asp Gly Gln Gln Val Leu Thr Val Pro Ala Gly Lys Val Ala
      260      265      270
Glu Glu Thr Val Ile Lys Glu Glu Glu Glu Glu Lys Leu Pro Leu Thr
      275      280      285
Lys Lys Pro Arg Ile Gly Glu Lys Thr Asn Ser Val Glu Glu Ser Lys
      290      295      300
Glu Gly Asn Glu Arg Glu Leu Leu Gln Gln Gln Leu Gln Glu Ala Asn
      305      310      315      320
Arg Arg Ala Gln Glu Tyr Arg His Gln Leu Leu Lys Lys Glu Gln Glu
      325      330      335
Ala Glu Gln Tyr Arg Leu Lys Leu Glu Ala Ile Ala Arg Gln Gln Pro
      340      345      350
Asn Gly Val Asp Phe Thr Met Val Glu Glu Val Ala Glu Val Asp Ala
      355      360      365
Val Val Val Thr Glu Gly Glu Leu Glu Glu Arg Glu Thr Lys Val Thr
      370      375      380
Gly Ser Ala Gly Ala Thr Gly Pro Pro Thr Arg Val Ser Met Ala Thr
      385      390      395      400
Val Ser Ser
      403

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<210> 3838
<211> 444
<212> PRT
<213> Homo sapiens

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```

      <400> 3838
Met Ile Glu Asp Asn Lys Glu Asn Lys Asp His Ser Leu Glu Arg Gly
  1      5      10      15
Arg Ala Ser Leu Ile Phe Ser Leu Lys Asn Glu Val Gly Gly Leu Ile
      20      25      30
Lys Ala Leu Lys Ile Phe Gln Glu Lys His Val Asn Leu Leu His Ile
      35      40      45
Glu Ser Arg Lys Ser Lys Arg Arg Asn Ser Glu Phe Glu Ile Phe Val
      50      55      60
Asp Cys Asp Ile Asn Arg Glu Gln Leu Asn Asp Ile Phe His Leu Leu
      65      70      75      80
Lys Ser His Thr Asn Val Leu Ser Val Asn Leu Pro Asp Asn Phe Thr
      85      90      95
Leu Lys Glu Asp Gly Met Glu Thr Val Pro Trp Phe Pro Lys Lys Ile
      100      105      110
Ser Asp Leu Asp His Cys Ala Asn Arg Val Leu Met Tyr Gly Ser Glu
      115      120      125
Leu Asp Ala Asp His Pro Gly Phe Lys Asp Asn Val Tyr Arg Lys Arg
      130      135      140
Arg Lys Tyr Phe Ala Asp Leu Ala Met Asn Tyr Lys His Gly Asp Pro
      145      150      155      160
Ile Pro Lys Val Glu Phe Thr Glu Glu Glu Ile Lys Thr Trp Gly Thr
      165      170      175
Val Phe Gln Glu Leu Asn Lys Leu Tyr Pro Thr His Ala Cys Arg Glu
      180      185      190
Tyr Leu Lys Asn Leu Pro Leu Leu Ser Lys Tyr Cys Gly Tyr Arg Glu

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195	200	205
Asp Asn Ile Pro Gln Leu Glu Asp Val Ser Asn Phe Leu Lys Glu Arg		
210	215	220
Thr Gly Phe Ser Ile Arg Pro Val Ala Gly Tyr Leu Ser Pro Arg Asp		
225	230	235
Phe Leu Ser Gly Leu Ala Phe Arg Val Phe His Cys Thr Gln Tyr Val		
245	250	255
Arg His Ser Ser Asp Pro Phe Tyr Thr Pro Glu Pro Asp Thr Cys His		
260	265	270
Glu Leu Leu Gly His Val Pro Leu Leu Ala Glu Pro Ser Phe Ala Gln		
275	280	285
Phe Ser Gln Glu Ile Gly Leu Ala Ser Leu Gly Ala Ser Glu Glu Ala		
290	295	300
Val Gln Lys Leu Ala Thr Cys Tyr Phe Phe Thr Val Glu Phe Gly Leu		
305	310	315
Cys Lys Gln Asp Gly Gln Leu Arg Val Phe Gly Ala Gly Leu Leu Ser		
325	330	335
Ser Ile Ser Glu Leu Lys His Ala Leu Ser Gly His Ala Lys Val Lys		
340	345	350
Pro Phe Asp Pro Lys Ile Thr Cys Lys Gln Glu Cys Leu Ile Thr Thr		
355	360	365
Phe Gln Asp Val Tyr Phe Val Ser Glu Ser Phe Glu Asp Ala Lys Glu		
370	375	380
Lys Met Arg Glu Phe Thr Lys Thr Ile Lys Arg Pro Phe Gly Val Lys		
385	390	395
Tyr Asn Pro Tyr Thr Arg Ser Ile Gln Ile Leu Lys Asp Thr Lys Ser		
405	410	415
Ile Thr Ser Ala Met Asn Glu Leu Gln His Asp Leu Asp Val Val Ser		
420	425	430
Asp Ala Leu Ala Lys Val Ser Arg Lys Pro Ser Ile		
435	440	444

<210> 3839

<211> 858

<212> PRT

<213> Homo sapiens

<400> 3839

Met Val Asn Phe Thr Val Asp Gln Ile Arg Ala Ile Met Asp Lys Lys		
1	5	10
Ala Asn Ile Arg Asn Met Ser Val Ile Ala His Val Asp His Gly Lys		
20	25	30
Ser Thr Leu Thr Asp Ser Leu Val Cys Lys Ala Gly Ile Ile Ala Ser		
35	40	45
Ala Arg Ala Gly Glu Thr Arg Phe Thr Asp Thr Arg Lys Asp Glu Gln		
50	55	60
Glu Arg Cys Ile Thr Ile Lys Ser Thr Ala Ile Ser Leu Phe Tyr Glu		
65	70	75
Leu Ser Glu Asn Asp Leu Asn Phe Ile Lys Gln Ser Lys Asp Gly Ala		
85	90	95
Gly Phe Leu Ile Asn Leu Ile Asp Ser Pro Gly His Val Asp Phe Ser		
100	105	110
Ser Glu Val Thr Ala Ala Leu Arg Val Thr Asp Gly Ala Leu Val Val		
115	120	125
Val Asp Cys Val Ser Gly Val Cys Val Gln Thr Glu Thr Val Leu Arg		
130	135	140
Gln Ala Ile Ala Glu Arg Ile Lys Pro Val Leu Met Met Asn Lys Met		
145	150	155
Asp Arg Ala Leu Leu Glu Leu Gln Leu Glu Pro Glu Glu Leu Tyr Gln		
165	170	175
Thr Phe Gln Arg Ile Val Glu Asn Val Asn Val Ile Ile Ser Thr Tyr		

										180											185											190
Gly	Glu	Gly	Glu	Ser	Gly	Pro	Met	Gly	Asn	Ile	Met	Ile	Asp	Pro	Val																	
										195											200											205
Leu	Gly	Thr	Val	Gly	Phe	Gly	Ser	Gly	Leu	His	Gly	Trp	Ala	Phe	Thr																	
										210											215											220
Leu	Lys	Gln	Phe	Ala	Glu	Met	Tyr	Val	Ala	Lys	Phe	Ala	Ala	Lys	Gly																	
										225											230											235
Glu	Gly	Gln	Leu	Gly	Pro	Ala	Glu	Arg	Ala	Lys	Lys	Val	Glu	Asp	Met																	
										245											250											255
Met	Lys	Lys	Leu	Trp	Gly	Asp	Arg	Tyr	Phe	Asp	Pro	Ala	Asn	Gly	Lys																	
										260											265											270
Phe	Ser	Lys	Ser	Ala	Thr	Ser	Pro	Glu	Gly	Lys	Lys	Leu	Pro	Arg	Thr																	
										275											280											285
Phe	Cys	Gln	Leu	Ile	Leu	Asp	Pro	Ile	Phe	Lys	Val	Phe	Asp	Ala	Ile																	
										290											295											300
Met	Asn	Phe	Lys	Lys	Glu	Glu	Thr	Ala	Lys	Leu	Ile	Glu	Lys	Leu	Asp																	
										305											310											315
Ile	Lys	Leu	Asp	Ser	Glu	Asp	Lys	Asp	Lys	Glu	Gly	Lys	Pro	Leu	Leu																	
										325											330											335
Lys	Ala	Val	Met	Arg	Arg	Trp	Leu	Pro	Ala	Gly	Asp	Ala	Leu	Leu	Gln																	
										340											345											350
Met	Ile	Thr	Ile	His	Leu	Pro	Ser	Pro	Val	Thr	Ala	Gln	Lys	Tyr	Arg																	
										355											360											365
Cys	Glu	Leu	Leu	Tyr	Glu	Gly	Pro	Pro	Asp	Asp	Glu	Ala	Ala	Met	Gly																	
										370											375											380
Ile	Lys	Ser	Cys	Asp	Pro	Lys	Gly	Pro	Leu	Met	Met	Tyr	Ile	Ser	Lys																	
										385											390											395
Met	Val	Pro	Thr	Ser	Asp	Lys	Gly	Arg	Phe	Tyr	Ala	Phe	Gly	Arg	Val																	
										405											410											415
Phe	Ser	Gly	Leu	Val	Ser	Thr	Gly	Leu	Lys	Val	Arg	Ile	Met	Gly	Pro																	
										420											425											430
Asn	Tyr	Thr	Pro	Gly	Lys	Lys	Glu	Asp	Leu	Tyr	Leu	Lys	Pro	Ile	Gln																	
										435											440											445
Arg	Thr	Ile	Leu	Met	Met	Gly	Arg	Tyr	Val	Glu	Pro	Ile	Glu	Asp	Val																	
										450											455											460
Pro	Cys	Gly	Asn	Ile	Val	Gly	Leu	Val	Gly	Val	Asp	Gln	Phe	Leu	Val																	
										465											470											475
Lys	Thr	Gly	Thr	Ile	Thr	Thr	Phe	Glu	His	Ala	His	Asn	Met	Arg	Val																	
										485											490											495
Met	Lys	Phe	Ser	Val	Ser	Pro	Val	Val	Arg	Val	Ala	Val	Glu	Ala	Lys																	
										500											505											510
Asn	Pro	Ala	Asp	Leu	Pro	Lys	Leu	Val	Glu	Gly	Leu	Lys	Arg	Leu	Ala																	
										515											520											525
Lys	Ser	Asp	Pro	Met	Val	Gln	Cys	Ile	Ile	Glu	Glu	Ser	Gly	Glu	His																	
										530											535											540
Ile	Ile	Ala	Gly	Ala	Gly	Glu	Leu	His	Leu	Glu	Ile	Cys	Leu	Lys	Asp																	
										545											550											555
Leu	Glu	Glu	Asp	His	Ala	Cys	Ile	Pro	Ile	Lys	Lys	Ser	Asp	Pro	Val																	
										565											570											575
Val	Ser	Tyr	Arg	Glu	Thr	Val	Ser	Glu	Glu	Ser	Asn	Val	Leu	Cys	Leu																	
										580											585											590
Ser	Lys	Ser	Pro	Asn	Lys	His	Asn	Arg	Leu	Tyr	Met	Lys	Ala	Arg	Pro																	
										595											600											605
Phe	Pro	Asp	Gly	Leu	Ala	Glu	Asp	Ile	Asp	Lys	Gly	Glu	Val	Ser	Ala																	
										610											615											620
Arg	Gln	Glu	Leu	Lys	Gln	Arg	Ala	Arg	Tyr	Leu	Ala	Glu	Lys	Tyr	Glu																	
										625											630											635
Trp	Asp	Val	Ala	Glu	Ala	Arg	Lys	Ile	Trp	Cys	Phe	Gly	Pro	Asp	Gly																	
										645											650											655
Thr	Gly	Pro	Asn	Ile	Leu	Thr	Asp	Ile	Thr	Lys	Gly	Val	Gln	Tyr	Leu																	
										660											665											670
Asn	Glu	Ile	Lys	Asp	Ser	Val	Val	Ala	Gly	Phe	Gln	Trp	Ala	Thr	Lys																	
										675											680											685
Glu	Gly	Ala	Leu	Cys	Glu	Glu	Asn	Met	Arg	Gly	Val	Arg	Phe	Asp	Val																	

690	695	700
His Asp Val Thr Leu His Ala Asp Ala Ile His Arg Gly Gly Gly Gln		
705	710	715
Ile Ile Pro Thr Ala Arg Arg Cys Leu Tyr Ala Ser Val Leu Thr Ala		
	725	730
Gln Pro Arg Leu Met Glu Pro Ile Tyr Leu Val Glu Ile Gln Cys Pro		
	740	745
Glu Gln Val Val Gly Gly Ile Tyr Gly Val Leu Asn Arg Lys Arg Gly		
	755	760
His Val Phe Glu Glu Ser Gln Val Ala Gly Thr Pro Met Phe Val Val		
	770	775
Lys Ala Tyr Leu Pro Val Asn Glu Ser Phe Gly Phe Thr Ala Asp Leu		
785	790	795
Arg Ser Asn Thr Gly Gly Gln Ala Phe Pro Gln Cys Val Phe Asp His		
	805	810
Trp Gln Ile Leu Pro Gly Asp Pro Phe Asp Asn Ser Ser Arg Pro Ser		
	820	825
Gln Val Val Ala Glu Thr Arg Lys Arg Lys Gly Leu Lys Glu Gly Ile		
	835	840
Pro Ala Leu Asp Asn Phe Leu Asp Lys Leu		
850	855	858

<210> 3840
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 3840

Ser Ser Thr Arg Ser Arg Asp Phe Cys Cys Ser Glu Ala Ile Gln Gly		
1	5	10
Ser Leu Thr Arg Arg Glu Arg Arg Ala Ser Gly Val Arg Thr Arg Arg		
	20	25
Ser Gln Gly Ser Ser Ala Met Ala Ser Lys Ile Leu Leu Asn Val Gln		
	35	40
Glu Glu Val Thr Cys Pro Ile Cys Leu Glu Leu Leu Thr Glu Pro Leu		
	50	55
Ser Leu Asp Cys Gly His Ser Leu Cys Arg Ala Cys Ile Thr Val Ser		
65	70	75
Asn Lys Glu Ala Val Thr Ser Met Gly Gly Lys Ser Ser Cys Pro Val		
	85	90
Cys Gly Ile Ser Tyr Ser Phe Glu His Leu Gln Ala Asn Gln His Leu		
	100	105
Ala Asn Ile Val Glu Arg Leu Lys Glu Val Lys Leu Ser Pro Asp Asn		
	115	120
Gly Lys Lys Arg Asp Leu Cys Asp His His Gly Glu Lys Leu Leu Leu		
	130	135
Phe Cys Lys Glu Asp Arg Lys Val Ile Cys Trp Leu Cys Glu Arg Ser		
145	150	155
Gln Glu His Arg Gly His His Thr Val Leu Thr Glu Glu Val Phe Lys		
	165	170
Glu Cys Gln Glu Lys Leu Gln Ala Val Leu Lys Arg Leu Lys Lys Glu		
	180	185
Glu Glu Glu Ala Glu Lys Leu Glu Ala Asp Ile Arg Glu Glu Lys Thr		
	195	200
Ser Trp Lys Tyr Gln Val Gln Thr Glu Arg Gln Arg Ile Gln Thr Glu		
	210	215
Phe Asp Gln Leu Arg Ser Ile Leu Asn Asn Glu Glu Gln Arg Glu Leu		
225	230	235
Gln Arg Leu Glu Glu Glu Lys Lys Thr		
	245	250

<210> 3841
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 3841
 Gly Lys Ala Phe Ser Cys Phe Thr Tyr Leu Ser Gln His Arg Arg Thr
 1 5 10 15
 His Met Ala Glu Lys Pro Tyr Glu Cys Lys Thr Cys Lys Lys Ala Phe
 20 25 30
 Ser His Phe Gly Asn Leu Lys Val His Glu Arg Ile His Thr Gly Glu
 35 40 45
 Lys Pro Tyr Glu Cys Lys Glu Cys Arg Lys Ala Phe Ser Trp Leu Thr
 50 55 60
 Cys Leu Leu Arg His Glu Arg Ile His Thr Gly Lys Lys Ser Tyr Glu
 65 70 75 80
 Cys Gln Gln Cys Gly Lys Ala Phe Thr Arg Ser Arg Phe Leu Arg Gly
 85 90 95
 His Glu Lys Thr His Thr Gly Glu Lys Met His Glu Cys Lys Glu Cys
 100 105 110
 Gly Lys Ala Leu Ser Ser Leu Ser Ser Leu His Arg His Lys Arg Thr
 115 120 125
 His Trp Arg Asp Thr Leu
 130 134

<210> 3842
 <211> 74
 <212> PRT
 <213> Homo sapiens

<400> 3842
 Ala Val Leu Lys Asn Met Ala Pro Met Thr Ala Leu Gly Leu Leu Asp
 1 5 10 15
 Leu His Ile Leu Asn Leu Ile Leu Phe Leu Ser Ala Gly Glu Asp Phe
 20 25 30
 Thr Ser Val Val Ser Glu Ile Met Met Tyr Ile Leu Leu Val Phe Leu
 35 40 45
 Thr Leu Trp Leu Leu Ile Glu Met Ile Tyr Cys Tyr Arg Lys Val Ser
 50 55 60
 Lys Ala Glu Glu Ala Ala Gln Glu Asn Ala
 65 70 74

<210> 3843
 <211> 390
 <212> PRT
 <213> Homo sapiens

<400> 3843
 Ala Pro Ile Arg Asn Ser Arg Ile Asp Asp Phe Val Arg Arg Val Glu
 1 5 10 15
 Ser Lys Ala Thr Ser Ala Arg Cys Gly Leu Trp Gly Ser Gly Pro Arg
 20 25 30
 Arg Arg Pro Ala Ser Gly Met Phe Arg Gly Leu Ser Ser Trp Leu Gly
 35 40 45
 Leu Gln Gln Pro Val Ala Gly Gly Gly Gln Pro Asn Gly Asp Ala Pro

50	55	60
Pro Glu Gln	Pro Ser Glu Thr Val Ala Glu Ser	Ala Glu Glu Glu Leu
65	70	75
Gln Gln Ala Gly	Asp Gln Glu Leu Leu His Gln Ala Lys Asp Phe Gly	80
	85	90
Asn Tyr Leu Phe Asn Phe Ala Ser Ala Ala Thr Lys Lys Ile Thr Glu		95
100	105	110
Ser Val Ala Glu Thr Ala Gln Thr Ile Lys Lys Ser Val Glu Glu Gly		
115	120	125
Lys Ile Asp Gly Ile Ile Asp Lys Thr Ile Ile Gly Asp Phe Gln Lys		
130	135	140
Glu Gln Lys Lys Phe Val Glu Glu Gln His Thr Lys Lys Ser Glu Ala		
145	150	155
Ala Val Pro Pro Trp Val Asp Thr Asn Asp Glu Glu Thr Ile Gln Gln		
165	170	175
Gln Ile Leu Ala Leu Ser Ala Asp Lys Arg Asn Phe Leu Arg Asp Pro		
180	185	190
Pro Ala Gly Val Gln Phe Asn Phe Asp Phe Asp Gln Met Tyr Pro Val		
195	200	205
Ala Leu Val Met Leu Gln Glu Asp Glu Leu Leu Ser Lys Met Arg Phe		
210	215	220
Ala Leu Val Pro Lys Leu Val Lys Glu Glu Val Phe Trp Arg Asn Tyr		
225	230	235
Phe Tyr Arg Val Ser Leu Ile Lys Gln Ser Ala Gln Leu Thr Ala Leu		
245	250	255
Ala Ala Gln Gln Gln Ala Ala Gly Lys Glu Glu Lys Ser Asn Gly Arg		
260	265	270
Glu Gln Asp Leu Pro Leu Ala Glu Ala Val Arg Pro Lys Thr Pro Pro		
275	280	285
Val Val Ile Lys Ser Gln Leu Lys Thr Gln Glu Asp Glu Glu Glu Ile		
290	295	300
Ser Thr Ser Pro Gly Val Ser Glu Phe Val Ser Asp Ala Phe Asp Ala		
305	310	315
Cys Asn Leu Asn Gln Glu Asp Leu Arg Lys Glu Met Glu Gln Leu Val		
325	330	335
Leu Asp Lys Lys Gln Glu Glu Thr Ala Val Leu Glu Glu Asp Ser Ala		
340	345	350
Asp Trp Glu Lys Glu Leu Gln Gln Glu Leu Gln Glu Tyr Glu Val Val		
355	360	365
Thr Glu Ser Glu Lys Arg Asp Glu Asn Trp Asp Lys Glu Ile Glu Lys		
370	375	380
Met Leu Gln Glu Glu Asn		
385	390	

<210> 3844

<211> 217

<212> PRT

<213> Homo sapiens

<400> 3844

Leu Pro Pro Ala Gln Ile Pro Glu Ala Trp Leu Leu Leu Ala Asn Val	
1	5
Val Val Val Leu Ile Leu Val Pro Leu Lys Asp Arg Leu Ile Asp Pro	
20	25
Leu Leu Leu Arg Cys Lys Leu Leu Pro Ser Ala Leu Gln Lys Met Ala	
35	40
Leu Gly Met Phe Phe Gly Phe Thr Ser Val Ile Val Ala Gly Val Leu	
50	55
Glu Met Glu Arg Leu His Tyr Ile His His Asn Glu Thr Val Ser Gln	
65	70
Gln Ile Gly Glu Val Leu Tyr Asn Ala Ala Pro Leu Ser Ile Trp Trp	
	75
	80

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<210> 3845
<211> 643
<212> PRT
<213> Homo sapiens
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5599

290 295 300
 Val Arg Ser Arg Ser Ile Arg Ser Val Ala Ile Glu Val Asp Gly Arg
 305 310 315 320
 Val Tyr His Val Gly Leu Gly Asp Ala Ala Gln Pro Arg Asn Leu Thr
 325 330 335
 Lys Arg His Trp Pro Gly Ala Pro Glu Asp Gln Asp Asp Lys Asp Gly
 340 345 350
 Gly Asp Phe Ser Gly Thr Gly Gly Leu Pro Asp Tyr Ser Ala Ala Asn
 355 360 365
 Pro Ile Lys Val Thr His Arg Cys Tyr Ile Leu Glu Asn Asp Thr Val
 370 375 380
 Gln Cys Asp Leu Asp Leu Tyr Lys Ser Leu Gln Ala Trp Lys Asp His
 385 390 395 400
 Lys Leu His Ile Asp His Glu Ile Glu Thr Leu Gln Asn Lys Ile Lys
 405 410 415
 Asn Leu Arg Glu Val Arg Gly His Leu Lys Lys Lys Arg Pro Glu Glu
 420 425 430
 Cys Asp Cys His Lys Ile Ser Tyr His Thr Gln His Lys Gly Arg Leu
 435 440 445
 Lys His Arg Gly Ser Ser Leu His Pro Phe Arg Lys Gly Leu Gln Glu
 450 455 460
 Lys Asp Lys Val Trp Leu Leu Arg Glu Gln Lys Arg Lys Lys Lys Leu
 465 470 475 480
 Arg Lys Leu Leu Lys Arg Leu Gln Asn Asn Asp Thr Cys Ser Met Pro
 485 490 495
 Gly Leu Thr Cys Phe Thr His Asp Asn Gln His Trp Gln Thr Ala Pro
 500 505 510
 Phe Trp Thr Leu Gly Pro Phe Cys Ala Cys Thr Ser Ala Asn Asn Asn
 515 520 525
 Thr Tyr Trp Cys Met Arg Thr Ile Asn Glu Thr His Asn Phe Leu Phe
 530 535 540
 Cys Glu Phe Ala Thr Gly Phe Leu Glu Tyr Phe Asp Leu Asn Thr Asp
 545 550 555 560
 Pro Tyr Gln Leu Met Asn Ala Val Asn Thr Leu Asp Arg Asp Val Leu
 565 570 575
 Asn Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys Lys Gly Tyr
 580 585 590
 Lys Gln Cys Asn Pro Arg Thr Arg Asn Met Asp Leu Gly Leu Lys Asp
 595 600 605
 Gly Gly Ser Tyr Glu Gln Tyr Arg Gln Phe Gln Arg Arg Lys Trp Pro
 610 615 620
 Glu Met Lys Arg Pro Ser Lys Ser Leu Gly Gln Leu Trp Glu Gly
 625 630 635 640
 Trp Glu Gly
 643

<210> 3846

<211> 643

<212> PRT

<213> Homo sapiens

<400> 3846

Pro Glu Asp Ser Ala Pro Gln Tyr Ser Arg Leu Phe Pro Asn Ala Ser
 1 5 10 15
 Gln His Ile Thr Pro Ser Tyr Asn Tyr Ala Pro Asn Pro Asp Lys His
 20 25 30
 Trp Ile Met Arg Tyr Thr Gly Pro Met Lys Pro Ile His Met Glu Phe
 35 40 45
 Thr Asn Met Leu Gln Arg Lys Arg Leu Gln Thr Leu Met Ser Val Asp
 50 55 60
 Asp Ser Met Glu Thr Ile Tyr Asn Met Leu Val Glu Thr Gly Glu Leu

65	70	75	80
Asp Asn Thr Tyr	Ile Val Tyr Thr Ala Asp His Gly Tyr His Ile Gly		
	85	90	95
Gln Phe Gly Leu Val Lys Gly Lys Ser Met Pro Tyr Glu Phe Asp Ile			
	100	105	110
Arg Val Pro Phe Tyr Val Arg Gly Pro Asn Val Glu Ala Gly Cys Leu			
	115	120	125
Asn Pro His Ile Val Leu Asn Ile Asp Leu Ala Pro Thr Ile Leu Asp			
	130	135	140
Ile Ala Gly Leu Asp Ile Pro Ala Asp Met Asp Gly Lys Ser Ile Leu			
	145	150	155
Lys Leu Leu Asp Thr Glu Arg Pro Val Asn Arg Phe His Leu Lys Lys			
	165	170	175
Lys Met Arg Val Trp Arg Asp Ser Phe Leu Val Glu Arg Gly Lys Leu			
	180	185	190
Leu His Lys Arg Asp Asn Asp Lys Val Asp Ala Gln Glu Glu Asn Phe			
	195	200	205
Leu Pro Lys Tyr Gln Arg Val Lys Asp Leu Cys Gln Arg Ala Glu Tyr			
	210	215	220
Gln Thr Ala Cys Glu Gln Leu Gly Gln Lys Trp Gln Cys Val Glu Asp			
	225	230	235
Ala Thr Gly Lys Leu Lys Leu His Lys Cys Lys Gly Pro Met Arg Leu			
	245	250	255
Gly Gly Ser Arg Ala Leu Ser Asn Leu Val Pro Lys Tyr Tyr Gly Gln			
	260	265	270
Gly Ser Glu Ala Cys Thr Cys Asp Ser Gly Asp Tyr Lys Leu Ser Leu			
	275	280	285
Ala Gly Arg Arg Lys Lys Leu Phe Lys Lys Lys Tyr Lys Ala Ser Tyr			
	290	295	300
Val Arg Ser Arg Ser Ile Arg Ser Val Ala Ile Glu Val Asp Gly Arg			
	305	310	315
Val Tyr His Val Gly Leu Gly Asp Ala Ala Gln Pro Arg Asn Leu Thr			
	325	330	335
Lys Arg His Trp Pro Gly Ala Pro Glu Asp Gln Asp Asp Lys Asp Gly			
	340	345	350
Gly Asp Phe Ser Gly Thr Gly Gly Leu Pro Asp Tyr Ser Ala Ala Asn			
	355	360	365
Pro Ile Lys Val Thr His Arg Cys Tyr Ile Leu Glu Asn Asp Thr Val			
	370	375	380
Gln Cys Asp Leu Asp Leu Tyr Lys Ser Leu Gln Ala Trp Lys Asp His			
	385	390	395
Lys Leu His Ile Asp His Glu Ile Glu Thr Leu Gln Asn Lys Ile Lys			
	405	410	415
Asn Leu Arg Glu Val Arg Gly His Leu Lys Lys Lys Arg Pro Glu Glu			
	420	425	430
Cys Asp Cys His Lys Ile Ser Tyr His Thr Gln His Lys Gly Arg Leu			
	435	440	445
Lys His Arg Gly Ser Ser Leu His Pro Phe Arg Lys Gly Leu Gln Glu			
	450	455	460
Lys Asp Lys Val Trp Leu Leu Arg Glu Gln Lys Arg Lys Lys Lys Leu			
	465	470	475
Arg Lys Leu Leu Lys Arg Leu Gln Asn Asn Asp Thr Cys Ser Met Pro			
	485	490	495
Gly Leu Thr Cys Phe Thr His Asp Asn Gln His Trp Gln Thr Ala Pro			
	500	505	510
Phe Trp Thr Leu Gly Pro Phe Cys Ala Cys Thr Ser Ala Asn Asn Asn			
	515	520	525
Thr Tyr Trp Cys Met Arg Thr Ile Asn Glu Thr His Asn Phe Leu Phe			
	530	535	540
Cys Glu Phe Ala Thr Gly Phe Leu Glu Tyr Phe Asp Leu Asn Thr Asp			
	545	550	555
Pro Tyr Gln Leu Met Asn Ala Val Asn Thr Leu Asp Arg Asp Val Leu			
	565	570	575
Asn Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys Lys Gly Tyr			

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<210> 3847
<211> 419
<212> PRT
<213> Homo sapiens
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5602

355 360 365
 Leu Ile Tyr Tyr Trp Arg Ile Lys Lys Phe His Asp Ala Cys Leu Asp
 370 375 380
 Met Met Pro Lys Ser Phe Lys Phe Leu Pro Gln Leu Pro Gly His Thr
 385 390 395 400
 Lys Arg Arg Ile Arg Pro Ser Ala Val Tyr Val Cys Gly Glu His Arg
 405 410 415
 Thr Val Val
 419

<210> 3848
 <211> 941
 <212> PRT
 <213> Homo sapiens

<400> 3848
 Ser Ser Ala Val Ala Arg Arg Arg Arg Ser Trp Ala Ser Leu Val
 1 5 10 15
 Leu Ala Phe Leu Gly Val Cys Leu Gly Ile Thr Leu Ala Val Asp Arg
 20 25 30
 Ser Asn Phe Lys Thr Cys Glu Glu Ser Ser Phe Cys Lys Arg Gln Arg
 35 40 45
 Ser Ile Arg Pro Gly Leu Ser Pro Tyr Arg Ala Leu Leu Asp Ser Leu
 50 55 60
 Gln Leu Gly Pro Asp Ser Leu Thr Val His Leu Ile His Glu Val Thr
 65 70 75 80
 Lys Val Leu Leu Val Leu Glu Leu Gln Gly Leu Gln Lys Asn Met Thr
 85 90 95
 Arg Phe Arg Ile Asp Glu Leu Glu Pro Arg Arg Pro Arg Tyr Arg Val
 100 105 110
 Pro Asp Val Leu Val Ala Asp Pro Pro Ile Ala Arg Leu Ser Val Ser
 115 120 125
 Gly Arg Asp Glu Asn Ser Val Glu Leu Thr Met Ala Glu Gly Pro Tyr
 130 135 140
 Lys Ile Ile Leu Thr Ala Arg Pro Phe Arg Leu Asp Leu Leu Glu Asp
 145 150 155 160
 Arg Ser Leu Leu Leu Ser Val Asn Ala Arg Gly Leu Leu Glu Phe Glu
 165 170 175
 His Gln Arg Ala Pro Arg Val Ser Gln Gly Ser Lys Asp Pro Ala Glu
 180 185 190
 Gly Asp Gly Ala Gln Pro Glu Glu Thr Pro Arg Asp Gly Asp Lys Pro
 195 200 205
 Glu Glu Thr Gln Gly Lys Ala Glu Lys Asp Glu Pro Gly Ala Trp Glu
 210 215 220
 Glu Thr Phe Lys Thr His Ser Asp Ser Lys Pro Tyr Gly Pro Met Ser
 225 230 235 240
 Val Gly Leu Asp Phe Ser Leu Pro Gly Met Glu His Val Tyr Gly Ile
 245 250 255
 Pro Glu His Ala Asp Asn Leu Arg Leu Lys Val Thr Glu Gly Gly Glu
 260 265 270
 Pro Tyr Arg Leu Tyr Asn Leu Asp Val Phe Gln Tyr Glu Leu Tyr Asn
 275 280 285
 Pro Met Ala Leu Tyr Gly Ser Val Pro Val Leu Leu Ala His Asn Pro
 290 295 300
 His Arg Asp Leu Gly Ile Phe Trp Leu Asn Ala Ala Glu Thr Trp Val
 305 310 315 320
 Asp Ile Ser Ser Asn Thr Ala Gly Lys Thr Leu Phe Gly Lys Met Met
 325 330 335
 Asp Tyr Leu Gln Gly Ser Gly Glu Thr Pro Gln Thr Asp Val Arg Trp
 340 345 350
 Met Ser Glu Thr Gly Ile Ile Asp Val Phe Leu Leu Leu Gly Pro Ser

355	360	365
Ile Ser Asp Val Phe Arg Gln Tyr Ala Ser Leu Thr Gly Thr Gln Ala		
370	375	380
Leu Pro Pro Leu Phe Ser Leu Gly Tyr His Gln Ser Arg Trp Asn Tyr		
385	390	395
Arg Asp Glu Ala Asp Val Leu Glu Val Asp Gln Gly Phe Asp Asp His		
405	410	415
Asn Leu Pro Cys Asp Val Ile Trp Leu Asp Ile Glu His Ala Asp Gly		
420	425	430
Lys Arg Tyr Phe Thr Trp Asp Pro Ser Arg Phe Pro Gln Pro Arg Thr		
435	440	445
Met Leu Glu Arg Leu Ala Ser Lys Arg Arg Lys Leu Val Ala Ile Val		
450	455	460
Asp Pro His Ile Lys Val Asp Ser Gly Tyr Arg Val His Glu Glu Leu		
465	470	475
Arg Asn Leu Gly Leu Tyr Val Lys Thr Arg Asp Gly Ser Asp Tyr Glu		
485	490	495
Gly Trp Cys Trp Pro Gly Ser Ala Gly Tyr Pro Asp Phe Thr Asn Pro		
500	505	510
Thr Met Arg Ala Trp Trp Ala Asn Met Phe Ser Tyr Asp Asn Tyr Glu		
515	520	525
Gly Ser Ala Pro Asn Leu Phe Val Trp Asn Asp Met Asn Glu Pro Ser		
530	535	540
Val Phe Asn Gly Pro Glu Val Thr Met Leu Lys Asp Ala Gln His Tyr		
545	550	555
Gly Gly Trp Glu His Arg Asp Val His Asn Ile Tyr Gly Leu Tyr Val		
565	570	575
His Met Ala Thr Ala Asp Gly Leu Arg Gln Arg Ser Gly Gly Met Glu		
580	585	590
Arg Pro Phe Val Leu Ala Arg Ala Phe Phe Ala Gly Ser Gln Arg Phe		
595	600	605
Gly Ala Val Trp Thr Gly Asp Asn Thr Ala Glu Trp Asp His Leu Lys		
610	615	620
Ile Ser Ile Pro Met Cys Leu Ser Leu Gly Leu Val Gly Leu Ser Phe		
625	630	635
Cys Gly Ala Asp Val Gly Gly Phe Phe Lys Asn Pro Glu Pro Glu Leu		
645	650	655
Leu Val Arg Trp Tyr Gln Met Gly Ala Tyr Gln Pro Phe Phe Arg Ala		
660	665	670
His Ala His Leu Asp Thr Gly Arg Arg Glu Pro Trp Leu Leu Pro Ser		
675	680	685
Gln His Asn Asp Ile Ile Arg Asp Ala Leu Gly Gln Arg Tyr Ser Leu		
690	695	700
Leu Pro Phe Trp Tyr Thr Leu Leu Tyr Gln Ala His Arg Glu Gly Ile		
705	710	715
Pro Val Met Arg Pro Leu Trp Val Gln Tyr Pro Gln Asp Val Thr Thr		
725	730	735
Phe Asn Ile Asp Asp Gln Tyr Leu Leu Gly Asp Ala Leu Leu Val His		
740	745	750
Pro Val Ser Asp Ser Gly Ala His Gly Val Gln Val Tyr Leu Pro Gly		
755	760	765
Gln Gly Glu Val Trp Tyr Asp Ile Gln Ser Tyr Gln Lys His His Gly		
770	775	780
Pro Gln Thr Leu Tyr Leu Pro Val Thr Leu Ser Ser Ile Pro Val Phe		
785	790	795
Gln Arg Gly Gly Thr Ile Val Pro Arg Trp Met Arg Val Arg Arg Ser		
805	810	815
Ser Glu Cys Met Lys Asp Asp Pro Ile Thr Leu Phe Val Ala Leu Ser		
820	825	830
Pro Gln Gly Thr Ala Gln Gly Glu Leu Phe Leu Asp Asp Gly His Thr		
835	840	845
Phe Asn Tyr Gln Thr Arg Gln Glu Phe Leu Leu Arg Arg Phe Ser Phe		
850	855	860
Ser Gly Asn Thr Leu Val Ser Ser Ser Ala Asp Pro Glu Gly His Phe		

865 870 875 880
 Glu Thr Pro Ile Trp Ile Glu Arg Val Val Ile Ile Gly Ala Gly Lys
 885 890 895
 Pro Ala Ala Val Val Leu Gln Thr Lys Gly Ser Pro Glu Ser Arg Leu
 900 905 910
 Ser Phe Gln His Asp Pro Glu Thr Ser Val Leu Val Leu Arg Lys Pro
 915 920 925
 Gly Ile Asn Val Ala Ser Asp Trp Ser Ile His Leu Arg
 930 935 940 941

<210> 3849

<211> 775

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(774)

<223> Xaa = any amino acid or nothing

<400> 3849

Arg Ala Arg Asn Ala Arg Gly Cys Trp Gly Val Cys Arg Ser Gly Phe
 1 5 10 15
 Ser Ser Ala Val Cys Gly Ala Ala Arg Met Glu Gln Val Ala Glu Gly
 20 25 30
 Ala Arg Val Thr Ala Val Pro Val Ser Ala Ala Asp Ser Thr Glu Glu
 35 40 45
 Leu Ala Glu Val Glu Glu Gly Val Gly Val Val Gly Glu Asp Asn Asp
 50 55 60
 Ala Ala Ala Arg Gly Ala Glu Ala Phe Gly Asp Ser Glu Glu Asp Gly
 65 70 75 80
 Glu Asp Val Phe Glu Val Glu Lys Ile Leu Asp Met Lys Thr Glu Gly
 85 90 95
 Gly Lys Val Leu Tyr Lys Val Arg Trp Lys Gly Tyr Thr Ser Asp Asp
 100 105 110
 Asp Thr Trp Glu Pro Glu Ile His Leu Glu Asp Cys Lys Glu Val Leu
 115 120 125
 Leu Glu Phe Arg Lys Lys Ile Ala Glu Asn Lys Ala Lys Ala Val Arg
 130 135 140
 Lys Asp Ile Gln Arg Leu Ser Leu Asn Asn Asp Ile Phe Glu Ala Asn
 145 150 155 160
 Ser Asp Ser Asp Gln Gln Ser Glu Thr Lys Glu Asp Thr Ser Pro Lys
 165 170 175
 Lys Lys Lys Lys Lys Leu Arg Gln Arg Glu Glu Lys Ser Pro Asp Asp
 180 185 190
 Leu Lys Lys Lys Lys Ala Lys Ala Gly Lys Leu Lys Asp Lys Ser Lys
 195 200 205
 Pro Asp Leu Glu Ser Ser Leu Glu Ser Leu Val Phe Asp Leu Arg Thr
 210 215 220
 Lys Lys Arg Ile Ser Glu Ala Lys Glu Glu Leu Lys Glu Ser Lys Lys
 225 230 235 240
 Pro Lys Lys Asp Glu Val Lys Glu Thr Lys Glu Leu Lys Lys Val Lys
 245 250 255
 Lys Gly Glu Ile Arg Asp Leu Lys Thr Lys Thr Arg Glu Asp Pro Lys
 260 265 270
 Glu Asn Arg Lys Thr Lys Lys Glu Lys Phe Val Glu Ser Gln Val Glu
 275 280 285
 Ser Glu Ser Ser Val Leu Asn Asp Ser Pro Phe Pro Glu Asp Asp Ser
 290 295 300
 Glu Gly Leu His Ser Asp Ser Arg Glu Glu Lys Gln Asn Thr Lys Ser
 305 310 315 320
 Ala Arg Glu Arg Ala Gly Gln Asp Met Gly Leu Glu His Gly Phe Glu

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<210> 3850
<211> 955
<212> PRT
<213> Homo sapiens
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<221> misc_feature
 <222> (1)...(953)
 <223> Xaa = any amino acid or nothing

<400> 3850

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Pro Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gly
 1          5          10          15
Arg Gly Pro Ser Phe Thr Pro Cys Phe Ser Pro Ser Leu Ala Val Glu
          20          25          30
Pro Ser Arg Arg Thr Arg Leu Gly Ser Asp Pro Ala Gln Ala Met Ala
          35          40          45
Gly Asn Val Lys Lys Ser Ser Gly Ala Gly Gly Gly Ser Gly Ser Gly
          50          55          60
Gly Ser Gly Ser Gly Gly Leu Ile Gly Leu Met Lys Asp Ala Phe Gln
          65          70          75          80
Pro His His His His His His His Leu Ser Pro His Pro Pro Gly Thr
          85          90          95
Val Asp Lys Lys Met Val Glu Lys Cys Trp Lys Leu Met Asp Lys Val
          100          105          110
Val Arg Leu Cys Gln Asn Pro Lys Leu Ala Leu Lys Asn Ser Pro Pro
          115          120          125
Tyr Ile Leu Asp Leu Leu Pro Asp Thr Tyr Gln His Leu Arg Thr Ile
          130          135          140
Leu Ser Arg Tyr Glu Gly Lys Met Glu Thr Leu Gly Glu Asn Glu Tyr
          145          150          155          160
Phe Arg Val Phe Met Glu Asn Leu Met Lys Lys Thr Lys Gln Thr Ile
          165          170          175
Ser Leu Phe Lys Glu Gly Lys Glu Arg Met Tyr Glu Glu Asn Ser Gln
          180          185          190
Pro Arg Arg Asn Leu Thr Lys Leu Ser Leu Ile Phe Ser His Met Leu
          195          200          205
Ala Glu Leu Lys Gly Ile Phe Pro Ser Gly Leu Phe Gln Gly Asp Thr
          210          215          220
Phe Arg Ile Thr Lys Ala Asp Ala Ala Glu Phe Trp Arg Lys Ala Phe
          225          230          235          240
Gly Glu Lys Thr Ile Val Pro Trp Lys Ser Phe Arg Gln Ala Leu His
          245          250          255
Glu Val His Pro Ile Ser Ser Gly Leu Glu Ala Met Ala Leu Lys Ser
          260          265          270
Thr Ile Asp Leu Thr Cys Asn Asp Tyr Ile Ser Val Phe Glu Phe Asp
          275          280          285
Ile Phe Thr Arg Leu Phe Gln Pro Trp Ser Ser Leu Leu Arg Asn Trp
          290          295          300
Asn Ser Leu Ala Val Thr His Pro Gly Tyr Met Ala Phe Leu Thr Tyr
          305          310          315          320
Asp Glu Val Lys Ala Arg Leu Gln Lys Phe Ile His Lys Pro Gly Ser
          325          330          335
Tyr Ile Phe Arg Leu Ser Cys Thr Arg Leu Gly Gln Trp Ala Ile Gly
          340          345          350
Tyr Val Thr Ala Asp Gly Asn Ile Leu Gln Thr Ile Pro His Asn Lys
          355          360          365
Pro Leu Phe Gln Ala Leu Ile Asp Gly Phe Arg Glu Gly Phe Tyr Leu
          370          375          380
Phe Pro Asp Gly Arg Asn Gln Asn Pro Asp Leu Thr Gly Leu Cys Glu
          385          390          395          400
Pro Thr Pro Gln Asp His Ile Lys Val Thr Gln Glu Gln Tyr Glu Leu
          405          410          415
Tyr Cys Glu Met Gly Ser Thr Phe Gln Leu Cys Lys Ile Cys Ala Glu
          420          425          430
Asn Asp Lys Asp Val Lys Ile Glu Pro Cys Gly His Leu Met Cys Thr
          435          440          445
Ser Cys Leu Thr Ser Trp Gln Glu Ser Glu Gly Gln Gly Cys Pro Phe

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450	455	460
Cys Arg Cys Glu Ile Lys Gly Thr Glu Pro Ile Val Val Asp Pro Phe		
465	470	475
Asp Pro Arg Gly Ser Gly Ser Leu Leu Arg Gln Gly Ala Glu Gly Ala		480
	485	490
Pro Ser Pro Asn Tyr Asp Asp Asp Asp Glu Arg Ala Asp Asp Thr		495
	500	505
Leu Phe Met Met Lys Glu Leu Ala Gly Ala Lys Val Glu Arg Pro Pro		510
	515	520
Ser Pro Phe Ser Met Ala Pro Gln Ala Ser Leu Pro Pro Val Pro Pro		525
	530	535
Arg Leu Asp Leu Leu Pro Gln Arg Val Cys Val Pro Ser Ser Ala Ser		540
545	550	555
Ala Leu Gly Thr Ala Ser Lys Ala Ala Ser Gly Ser Leu His Lys Asp		560
	565	570
Lys Pro Leu Pro Val Pro Pro Thr Leu Arg Asp Leu Pro Pro Pro Pro		575
	580	585
Pro Pro Asp Arg Pro Tyr Ser Val Gly Ala Glu Ser Arg Pro Gln Arg		590
	595	600
Arg Pro Leu Pro Cys Thr Pro Gly Asp Cys Pro Ser Arg Asp Lys Leu		605
610	615	620
Pro Pro Val Pro Ser Ser Arg Leu Gly Asp Ser Trp Leu Pro Arg Pro		625
	630	635
Ile Pro Lys Val Pro Val Ser Ala Pro Ser Ser Ser Asp Pro Trp Thr		640
	645	650
Gly Arg Glu Leu Thr Asn Arg His Ser Leu Pro Phe Ser Leu Pro Ser		655
	660	665
Gln Met Glu Pro Arg Pro Asp Val Pro Arg Leu Gly Ser Thr Phe Ser		670
	675	680
Leu Asp Thr Ser Met Ser Met Asn Ser Ser Pro Leu Val Gly Pro Glu		685
690	695	700
Cys Asp His Pro Lys Ile Lys Pro Ser Ser Ser Ala Asn Ala Ile Tyr		705
	710	715
Ser Leu Ala Ala Arg Pro Leu Pro Val Pro Lys Leu Pro Pro Gly Glu		720
	725	730
Gln Cys Glu Gly Glu Glu Asp Thr Glu Tyr Met Thr Pro Ser Ser Arg		735
	740	745
Pro Leu Arg Pro Leu Asp Thr Ser Gln Ser Ser Arg Ala Cys Asp Cys		750
	755	760
Asp Gln Gln Ile Asp Ser Cys Thr Tyr Glu Ala Met Tyr Asn Ile Gln		765
770	775	780
Ser Gln Ala Pro Ser Ile Thr Glu Ser Ser Thr Phe Gly Glu Gly Asn		785
	790	795
Leu Ala Ala Ala His Ala Asn Thr Gly Pro Glu Glu Ser Glu Asn Glu		800
	805	810
Asp Asp Gly Tyr Asp Val Pro Lys Pro Pro Val Pro Ala Val Leu Ala		815
	820	825
Arg Arg Thr Leu Ser Asp Ile Ser Asn Ala Ser Ser Ser Phe Gly Leu		830
	835	840
Phe Val Leu Glu Arg Asp Pro Xaa Pro Gln Asn Val Thr Glu Gly Ser		845
	850	855
Gln Val Pro Glu Arg Pro Pro Lys Pro Phe Pro Arg Arg Ile Asn Ser		860
865	870	875
Glu Arg Lys Ala Gly Ser Cys Gln Gln Gly Ser Gly Pro Ala Ala Ser		880
	885	890
Ala Ala Thr Ala Ser Pro Gln Leu Ser Ser Glu Ile Glu Asn Leu Met		895
	900	905
Ser Gln Gly Tyr Ser Tyr Gln Asp Ile Gln Lys Ala Leu Val Ile Ala		910
	915	920
Gln Asn Asn Ile Glu Met Ala Lys Asn Ile Leu Arg Glu Phe Val Ser		925
	930	935
Ile Ser Ser Pro Ala His Val Ala Thr		940
945	950	953

<210> 3851
 <211> 932
 <212> PRT
 <213> Homo sapiens

 <221> misc_feature
 <222> (1)...(923)
 <223> Xaa = any amino acid or nothing

<400> 3851
 Gly Arg Val Gly Ser Met Asp Gly Ala Met Gly Pro Arg Gly Leu Leu
 1 5 10 15
 Leu Cys Met Tyr Leu Val Ser Leu Leu Ile Leu Gln Ala Met Pro Ala
 20 25 30
 Leu Gly Ser Ala Thr Gly Arg Ser Lys Ser Ser Glu Lys Arg Gln Ala
 35 40 45
 Val Asp Thr Ala Val Asp Gly Val Phe Ile Arg Ser Leu Lys Val Asn
 50 55 60
 Cys Lys Val Thr Ser Arg Phe Ala His Tyr Val Val Thr Ser Gln Val
 65 70 75 80
 Val Asn Thr Ala Asn Glu Ala Arg Glu Val Ala Phe Asp Leu Glu Ile
 85 90 95
 Pro Lys Thr Ala Phe Ile Ser Asp Phe Ala Val Thr Ala Asp Gly Asn
 100 105 110
 Ala Phe Ile Gly Asp Ile Lys Asp Lys Val Thr Ala Trp Lys Gln Tyr
 115 120 125
 Arg Lys Ala Ala Ile Ser Gly Glu Asn Ala Gly Leu Val Arg Ala Ser
 130 135 140
 Gly Arg Thr Met Glu Gln Phe Thr Ile His Leu Thr Val Asn Pro Gln
 145 150 155 160
 Ser Lys Val Thr Phe Gln Leu Thr Tyr Glu Glu Val Leu Lys Arg Asn
 165 170 175
 His Met Gln Tyr Glu Ile Val Ile Lys Val Lys Pro Lys Gln Leu Val
 180 185 190
 His His Phe Glu Ile Asp Val Asp Ile Phe Glu Pro Gln Gly Ile Ser
 195 200 205
 Lys Leu Asp Ala Gln Ala Ser Phe Leu Pro Lys Glu Leu Ala Ala Gln
 210 215 220
 Thr Ile Lys Lys Ser Phe Ser Gly Lys Lys Gly His Val Leu Phe Arg
 225 230 235 240
 Pro Thr Val Ser Gln Gln Gln Ser Cys Pro Thr Cys Ser Thr Ser Leu
 245 250 255
 Leu Asn Gly His Phe Lys Val Thr Tyr Asp Val Ser Arg Asp Lys Ile
 260 265 270
 Cys Asp Leu Leu Val Ala Asn Asn His Phe Ala His Phe Phe Ala Pro
 275 280 285
 Gln Asn Leu Thr Asn Met Asn Lys Asn Val Val Phe Val Ile Asp Ile
 290 295 300
 Ser Gly Ser Met Arg Gly Gln Lys Val Lys Gln Thr Lys Glu Ala Leu
 305 310 315 320
 Leu Lys Ile Leu Gly Asp Met Gln Pro Gly Asp Tyr Phe Asp Leu Val
 325 330 335
 Leu Phe Gly Thr Arg Val Gln Ser Trp Lys Gly Ser Leu Val Gln Ala
 340 345 350
 Ser Glu Ala Asn Leu Gln Ala Ala Gln Asp Phe Val Arg Gly Phe Ser
 355 360 365
 Leu Asp Glu Ala Thr Asn Leu Asn Gly Gly Leu Leu Arg Gly Ile Glu
 370 375 380
 Ile Leu Asn Gln Val Gln Glu Ser Leu Pro Glu Leu Ser Asn His Ala
 385 390 395 400
 Ser Ile Leu Ile Met Leu Thr Asp Gly Asp Pro Thr Glu Gly Val Thr

										405											410											415
Asp	Arg	Ser	Gln	Ile	Leu	Lys	Asn	Val	Arg	Asn	Ala	Ile	Arg	Gly	Arg																	
										420											425											430
Phe	Pro	Leu	Tyr	Asn	Leu	Gly	Phe	Gly	His	Asn	Val	Asp	Phe	Asn	Phe																	
										435											440											445
Leu	Glu	Val	Met	Ser	Met	Glu	Asn	Asn	Gly	Arg	Ala	Gln	Arg	Ile	Tyr																	
										450											455											460
Glu	Asp	His	Asp	Ala	Thr	Gln	Gln	Leu	Gln	Gly	Phe	Tyr	Ser	Gln	Val																	
										465											470											475
Ala	Lys	Pro	Leu	Leu	Val	Asp	Val	Asp	Leu	Gln	Tyr	Pro	Gln	Asp	Ala																	
										485											490											495
Val	Leu	Ala	Leu	Thr	Gln	Asn	His	His	Lys	Gln	Tyr	Tyr	Glu	Gly	Ser																	
										500											505											510
Glu	Ile	Val	Val	Ala	Gly	Arg	Ile	Ala	Asp	Asn	Lys	Gln	Ser	Ser	Phe																	
										515											520											525
Lys	Ala	Asp	Val	Gln	Ala	His	Gly	Glu	Gly	Gln	Glu	Phe	Ser	Ile	Thr																	
										530											535											540
Cys	Leu	Val	Asp	Glu	Glu	Met	Lys	Lys	Leu	Leu	Arg	Glu	Arg	Gly																		
										545											550											555
His	Met	Leu	Glu	Asn	His	Val	Glu	Arg	Leu	Trp	Ala	Tyr	Leu	Thr	Ile																	
										565											570											575
Gln	Glu	Leu	Leu	Ala	Lys	Arg	Met	Lys	Val	Asp	Arg	Glu	Val	Arg	Ala																	
										580											585											590
Asn	Leu	Ser	Ser	Gln	Ala	Leu	Arg	Met	Ser	Leu	Asp	Tyr	Gly	Phe	Val																	
										595											600											605
Thr	Pro	Leu	Thr	Ser	Met	Ser	Ile	Arg	Gly	Met	Ala	Asp	Gln	Asp	Gly																	
										610											615											620
Leu	Lys	Pro	Thr	Ile	Asp	Lys	Pro	Ser	Glu	Asp	Ser	Pro	Pro	Leu	Glu																	
										625											630											635
Met	Leu	Gly	Pro	Arg	Arg	Thr	Phe	Val	Leu	Ser	Ala	Leu	Gln	Pro	Ser																	
										645											650											655
Pro	Thr	His	Ser	Ser	Ser	Asn	Thr	Gln	Arg	Leu	Pro	Asp	Arg	Val	Thr																	
										660											665											670
Gly	Val	Asp	Thr	Asp	Pro	His	Phe	Ile	Ile	His	Val	Pro	Gln	Lys	Glu																	
										675											680											685
Asp	Thr	Leu	Cys	Phe	Asn	Ile	Asn	Glu	Glu	Pro	Gly	Val	Ile	Leu	Ser																	
										690											695											700
Leu	Val	Gln	Asp	Pro	Asn	Thr	Gly	Phe	Ser	Val	Asn	Gly	Gln	Leu	Ile																	
										705											710											715
Gly	Asn	Lys	Ala	Arg	Ser	Pro	Gly	Gln	His	Asp	Gly	Thr	Tyr	Phe	Gly																	
										725											730											735
Arg	Leu	Gly	Ile	Ala	Asn	Pro	Ala	Thr	Asp	Phe	Gln	Leu	Glu	Val	Thr																	
										740											745											750
Pro	Gln	Asn	Ile	Thr	Leu	Asn	Pro	Gly	Phe	Gly	Gly	Pro	Val	Phe	Ser																	
										755											760											765
Trp	Arg	Asp	Gln	Ala	Val	Leu	Arg	Gln	Asp	Gly	Val	Val	Val	Thr	Ile																	
										770											775											780
Asn	Lys	Lys	Arg	Asn	Leu	Val	Val	Ser	Val	Asp	Gly	Gly	Thr	Phe																		
										785											790											795
Glu	Val	Val	Leu	His	Arg	Val	Trp	Lys	Gly	Ser	Ser	Val	His	Gln	Asp																	
										805											810											815
Phe	Leu	Gly	Leu	Leu	Met	Cys	Trp	Asp	Lys	Ser	Ile	Gly	Met	Ser	Ser																	
										820											825											830
Pro	Gly	Arg	Lys	Gly	Cys	Trp	Gly	Gln	Phe	Phe	His	Pro	Ile	Arg	Phe																	
										835											840											845
Leu	Lys	Val	Ser	Xaa	His	Pro	Pro	Pro	Gly	Ser	Asp	Pro	Gln	Lys	Ala																	
										850											855											860
Gln	Met	Pro	Thr	Met	Val	Val	Arg	Asn	Pro	Pro	Gly	Leu	Thr	Val	Thr																	
										865											870											875
Arg	Gly	Leu	Gln	Lys	Asp	Tyr	Ser	Lys	Asp	Pro	Trp	His	Gly	Ala	Glu																	
										885											890											895
Val	Ser	Cys	Trp	Phe	Ile	His	Asn	Asn	Gly	Ala	Xaa	Ile	Thr	Asp	Cys																	
										900											905											910
Ala	Tyr	Thr	Asp	Tyr	Ile	Val	Pro	Asp	Ile	Phe																						

915

920

923

<210> 3852

<211> 566

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(564)

<223> Xaa = any amino acid or nothing

<400> 3852

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Thr Gln Val Ala Glu Ala Gly Arg Gly Glu Gly Val Val Ala Gly Ala
 1          5          10          15
Glu Thr Gly Arg Pro Gln Ser Ala Gly Met Asn Leu Glu Leu Leu Glu
      20          25          30
Ser Phe Gly Gln Asn Tyr Pro Glu Ala Asp Gly Thr Leu Asp Cys
      35          40          45
Ile Ser Met Ala Leu Thr Cys Thr Phe Asn Arg Trp Gly Thr Leu Leu
      50          55          60
Ala Val Gly Cys Asn Asp Gly Arg Ile Val Ile Trp Asp Phe Leu Thr
      65          70          75          80
Arg Gly Ile Ala Xaa Asn Lys Phe Ser Ala His Ile His Pro Val Cys
      85          90          95
Ser Leu Cys Trp Ser Arg Asp Gly His Lys Leu Val Ser Ala Ser Thr
      100          105          110
Asp Asn Ile Val Ser Gln Trp Asp Val Leu Ser Gly Asp Cys Asp Gln
      115          120          125
Arg Phe Arg Phe Pro Ser Pro Ile Leu Lys Val Gln Tyr His Pro Arg
      130          135          140
Asp Gln Asn Lys Val Leu Val Cys Pro Met Lys Ser Ala Pro Val Met
      145          150          155          160
Leu Thr Leu Ser Asp Ser Lys His Val Val Leu Pro Val Asp Asp Asp
      165          170          175
Ser Asp Leu Asn Val Val Ala Ser Phe Asp Arg Arg Gly Glu Tyr Ile
      180          185          190
Tyr Thr Gly Asn Ala Lys Gly Lys Ile Leu Val Leu Lys Thr Asp Ser
      195          200          205
Gln Asp Leu Val Ala Ser Phe Arg Val Thr Thr Gly Thr Ser Asn Thr
      210          215          220
Thr Ala Ile Lys Ser Ile Glu Phe Ala Arg Lys Gly Ser Cys Phe Leu
      225          230          235          240
Ile Asn Thr Ala Asp Arg Ile Ile Arg Val Tyr Asp Gly Arg Glu Ile
      245          250          255
Leu Thr Cys Gly Arg Asp Gly Glu Pro Glu Pro Met Gln Lys Leu Gln
      260          265          270
Asp Leu Val Asn Arg Thr Pro Trp Lys Lys Cys Cys Phe Ser Gly Asp
      275          280          285
Gly Glu Tyr Ile Val Ala Gly Ser Ala Arg Gln His Ala Leu Tyr Ile
      290          295          300
Trp Glu Lys Ser Ile Gly Asn Leu Val Lys Ile Leu His Gly Thr Arg
      305          310          315          320
Gly Glu Leu Leu Leu Asp Val Ala Trp His Pro Val Arg Pro Ile Ile
      325          330          335
Ala Ser Ile Ser Ser Gly Val Val Ser Ile Trp Ala Gln Asn Gln Val
      340          345          350
Glu Asn Trp Ser Ala Phe Ala Pro Asp Phe Lys Glu Leu Asp Glu Asn
      355          360          365
Val Glu Tyr Glu Glu Arg Glu Ser Glu Phe Asp Ile Glu Asp Glu Asp
      370          375          380
Lys Ser Glu Pro Glu Gln Thr Gly Ala Asp Ala Ala Glu Asp Glu Glu

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385              390              395              400
Val Asp Val Thr Ser Val Asp Pro Ile Ala Ala Phe Cys Ser Ser Asp
              405              410              415
Glu Glu Leu Glu Asp Ser Lys Ala Leu Leu Tyr Leu Pro Ile Ala Pro
              420              425              430
Glu Val Glu Asp Pro Glu Glu Asn Pro Tyr Gly Pro Pro Pro Asp Ala
              435              440              445
Val Gln Thr Ser Leu Met Asp Glu Gly Ala Ser Ser Glu Lys Lys Arg
              450              455              460
Gln Ser Ser Ala Asp Gly Ser Gln Pro Pro Lys Lys Lys Pro Lys Thr
465              470              475              480
Thr Asn Ile Glu Leu Gln Gly Val Pro Asn Asp Glu Val His Pro Leu
              485              490              495
Leu Gly Val Lys Gly Asp Gly Lys Ser Lys Lys Lys Gln Ala Gly Arg
              500              505              510
Pro Lys Gly Ser Lys Gly Lys Glu Lys Asp Ser Pro Phe Lys Pro Lys
              515              520              525
Leu Tyr Lys Gly Asp Arg Gly Leu Pro Leu Glu Gly Ser Ala Lys Gly
530              535              540
Lys Val Gln Ala Glu Leu Ser Gln Pro Leu Thr Ala Gly Gly Ala Ile
545              550              555              560
Ser Glu Leu Leu
              564

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<210> 3853

<211> 854

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(852)

<223> Xaa = any amino acid or nothing

<400> 3853

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Pro Leu Leu Phe Thr Cys Gly Arg Glu Val Arg Ala Arg Asp Pro Glu
 1              5              10              15
Lys Glu Gly Thr Ile Val Val Ala Gly Leu Lys Val Gln Val Gln Pro
              20              25              30
Arg Phe Leu Trp Ile Leu Cys Phe Ser Met Glu Glu Thr Gln Gly Glu
              35              40              45
Leu Thr Ser Ser Cys Gly Ser Lys Thr Met Ala Asn Val Ser Leu Ala
              50              55              60
Phe Arg Asp Val Ser Ile Asp Leu Ser Gln Glu Trp Glu Cys Leu
65              70              75              80
Asp Ala Val Gln Arg Asp Leu Tyr Lys Asp Val Met Leu Glu Asn Tyr
              85              90              95
Ser Asn Leu Val Ser Leu Asp Leu Glu Tyr Lys Tyr Ile Thr Lys Asn
              100              105              110
Leu Leu Ser Glu Lys Asn Val Cys Lys Ile Tyr Leu Ser Gln Leu Gln
              115              120              125
Thr Gly Glu Lys Ser Lys Asn Thr Ile His Glu Asp Thr Ile Phe Arg
              130              135              140
Asn Gly Leu Gln Cys Lys His Glu Phe Glu Arg Gln Glu Arg His Gln
145              150              155              160
Met Gly Cys Val Ser Gln Met Leu Ile Gln Lys Gln Ile Ser His Pro
              165              170              175
Leu His Pro Lys Ile His Ala Arg Glu Lys Ser Tyr Glu Cys Lys Glu
              180              185              190
Cys Arg Lys Ala Phe Arg Gln Gln Ser Tyr Leu Ile Gln His Leu Arg
              195              200              205
Ile His Thr Gly Glu Arg Pro Tyr Lys Cys Met Glu Cys Gly Lys Ala

```

210	215	220
Phe Cys Arg Val Gly Asp	Leu Arg Val His His	Thr Ile His Ala Gly
225	230	235
Glu Arg Pro Tyr Glu Cys Lys	Glu Cys Gly Lys Ala Phe Arg	Leu His
245	250	255
Tyr His Leu Thr Glu His Gln Arg	Ile His Ser Gly Val Lys Pro Tyr	
260	265	270
Glu Cys Lys Glu Cys Gly Lys Ala Phe Ser Arg	Val Arg Asp Leu Arg	
275	280	285
Val His Gln Thr Ile His Ala Gly Glu Arg Pro Tyr	Glu Cys Lys Glu	
290	295	300
Cys Gly Lys Ala Phe Arg Leu His Tyr Gln Leu Thr	Glu His Gln Arg	
305	310	315
Ile His Thr Gly Glu Arg Pro Tyr Glu Cys Lys Val	Cys Gly Lys Thr	
325	330	335
Phe Arg Val Gln Arg His Ile Ser Gln His Gln Lys	Ile His Thr Gly	
340	345	350
Val Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ser	His Gly	
355	360	365
Ser Tyr Leu Val Gln His Gln Lys Ile His Thr Gly Glu Lys Pro Tyr		
370	375	380
Glu Cys Lys Glu Cys Gly Lys Ser Phe Ser Phe His Ala Glu Leu Ala		
385	390	395
Arg His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Arg Glu		
405	410	415
Cys Gly Lys Ala Phe Arg Leu Gln Thr Glu Leu Thr Arg His His Arg		
420	425	430
Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ala		
435	440	445
Phe Ile Cys Gly Tyr Gln Leu Thr Leu His Leu Arg Thr His Thr Gly		
450	455	460
Glu Ile Pro Tyr Glu Cys Lys Glu Cys Gly Lys Thr Phe Ser Ser Arg		
465	470	475
Tyr His Leu Thr Gln His Tyr Arg Ile His Thr Gly Glu Lys Pro Tyr		
485	490	495
Ile Cys Asn Glu Cys Gly Lys Ala Phe Arg Leu Gln Gly Glu Leu Thr		
500	505	510
Arg His His Arg Ile His Thr Cys Glu Lys Pro Tyr Glu Cys Lys Glu		
515	520	525
Cys Gly Lys Ala Phe Ile His Ser Asn Gln Phe Ile Ser His Gln Arg		
530	535	540
Ile His Thr Ser Glu Ser Thr Tyr Ile Cys Lys Glu Cys Gly Lys Ile		
545	550	555
Phe Ser Arg Arg Tyr Asn Leu Thr Gln His Phe Lys Ile His Thr Gly		
565	570	575
Glu Lys Pro Tyr Ile Cys Asn Glu Cys Gly Lys Ala Phe Arg Phe Gln		
580	585	590
Thr Glu Leu Thr Gln His His Arg Ile His Thr Gly Glu Lys Pro Tyr		
595	600	605
Lys Cys Thr Glu Cys Gly Lys Ala Phe Ile Arg Ser Thr His Leu Thr		
610	615	620
Gln His His Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Thr Glu		
625	630	635
Cys Gly Lys Thr Phe Ser Arg His Tyr His Leu Thr Gln His His Arg		
645	650	655
Gly His Thr Gly Glu Lys Pro Tyr Ile Cys Asn Glu Cys Gly Asn Ala		
660	665	670
Phe Ile Cys Ser Tyr Arg Leu Thr Leu His Gln Arg Ile His Thr Gly		
675	680	685
Glu Leu Pro Tyr Glu Cys Lys Glu Cys Gly Lys Thr Phe Ser Arg Arg		
690	695	700
Tyr His Leu Thr Gln His Phe Arg Leu His Thr Gly Glu Lys Pro Tyr		
705	710	715
Ser Cys Lys Glu Cys Gly Asn Ala Phe Arg Leu Gln Ala Glu Leu Thr		

```

              725              730              735
Arg His His Ile Val His Thr Gly Glu Lys Pro Tyr Lys Cys Lys Glu
              740              745              750
Cys Gly Lys Ala Phe Ser Val Asn Ser Glu Leu Thr Arg His His Arg
              755              760              765
Ile His Thr Gly Glu Lys Pro Tyr Gln Cys Lys Glu Cys Gly Lys Ala
              770              775              780
Phe Ile Arg Ser Asp Gln Leu Thr Leu His Gln Lys Ile Ile Leu Val
785              790              795              800
Arg Asn Pro Met His Asn Val Lys Arg Ile Arg Trp Pro Leu Glu Asn
              805              810              815
Ala Leu Xaa Gln Arg Ile Cys Asn Leu Arg Asn Phe Leu Phe Val Thr
              820              825              830
Glu His Val Gly Ile Pro Phe Thr Ser Cys Ser Gln Phe Ile Arg Asn
              835              840              845
Tyr Phe Val Cys
850      852

```

<210> 3854

<211> 344

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(343)

<223> Xaa = any amino acid or nothing

<400> 3854

```

Leu Gln Ser Cys Trp Val Pro Gly Ile Pro Trp Pro Ser Val Gly Trp
1              5              10              15
Leu Ser Trp Leu Lys Asp Leu Pro Ser Cys Glu Ile His Ser Ala Ser
              20              25              30
Leu Ser Ala Val Leu Gln Gly Pro Gln Cys Ser Glu Met Leu Trp Pro
              35              40              45
Lys Asn Leu Thr Ser Trp Asp Asp Ser Ser Ser Val Ser Ser Gly Ile
              50              55              60
Ser Asp Thr Ile Asp Asn Leu Ser Thr Asp Asp Ile Asn Thr Ser Ser
65              70              75              80
Ser Ile Ser Ser Tyr Ala Asn Thr Pro Ala Ser Ser Arg Lys Asn Leu
              85              90              95
Asp Val Gln Thr Asp Ala Glu Lys His Ser Gln Val Glu Arg Asn Ser
              100             105             110
Leu Trp Ser Gly Asp Asp Val Lys Lys Ser Asp Gly Gly Ser Asp Ser
              115             120             125
Gly Ile Lys Met Glu Pro Gly Ser Lys Trp Arg Arg Asn Pro Ser Asp
130             135             140
Val Ser Asp Glu Ser Asp Lys Ser Thr Ser Gly Lys Lys Asn Pro Val
145             150             155             160
Ile Ser Gln Thr Gly Ser Trp Arg Arg Gly Met Thr Ala Gln Val Gly
              165             170             175
Ile Thr Met Pro Arg Thr Lys Ala Ser Ala Pro Ala Gly Ala Leu Lys
              180             185             190
Thr Pro Gly Thr Gly Lys Arg Pro Gly Leu Ser Gly Pro Gly Ala Pro
              195             200             205
Thr Pro Ala Ala Pro Pro Gln Leu Ala Arg Met Ala Trp Ala Phe Ser
210             215             220
Leu Ser Ala Ala Ser Thr Pro Ala Val Ser Pro Ser Thr Ser Pro Ser
225             230             235             240
Ala Val Glu Gly Ser Pro Ala Thr Ile Leu Pro Leu Ala Ser Ser Pro
              245             250             255
Pro Pro Arg Thr Thr Pro Xaa Leu Pro Leu Ser Glu Leu Thr Val Xaa

```

```

      260      265      270
Arg Pro Gln Glu Leu Val Arg Gly Arg Gly Cys Leu Gly Pro Gly Ala
      275      280      285
Pro Thr Pro Ala Ala Pro Pro Gln Leu Ala Arg Met Ala Trp Ala Phe
      290      295      300
Ser Leu Ser Ala Ala Ser Thr Pro Ala Val Ser Pro Ser Thr Ser Pro
305      310      315      320
Ser Ala Val Glu Gly Ser Pro Ala Thr Ile Leu Pro Leu Ala Ser Ser
      325      330      335
Pro Pro Pro Arg Thr Thr Pro
      340      343

```

<210> 3855

<211> 260

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1) ... (255)

<223> Xaa = any amino acid or nothing

<400> 3855

```

Phe Arg Gly Gly Asp Gly Ala Pro Gly Val Leu Lys Pro Gly Asn Pro
 1      5      10      15
Leu Pro Phe Pro Leu Pro Pro Leu Gln Tyr Pro Pro Pro Ser Thr Leu
      20      25      30
Ser His Ser Asp Asn Leu Ala Met Thr Ser Arg Ser Thr Ala Arg Pro
      35      40      45
Asn Gly Gln Pro Gln Ala Ser Lys Ile Cys Gln Phe Lys Leu Val Leu
50      55      60
Leu Gly Glu Ser Ala Val Gly Lys Ser Ser Leu Val Leu Arg Phe Val
65      70      75      80
Lys Gly Gln Phe His Glu Tyr Gln Glu Ser Thr Ile Gly Ala Ala Phe
      85      90      95
Leu Thr Gln Ser Val Cys Leu Asp Asp Thr Thr Val Lys Phe Glu Ile
      100      105      110
Trp Asp Thr Ala Gly Gln Glu Arg Tyr His Ser Leu Ala Pro Met Tyr
      115      120      125
Tyr Arg Gly Ala Gln Ala Ala Ile Val Val Tyr Asp Ile Thr Asn Gln
130      135      140
Glu Thr Phe Ala Arg Ala Lys Thr Trp Val Lys Glu Leu Gln Arg Gln
145      150      155      160
Ala Ser Pro Ser Ile Val Val Gly Leu Ala Gly Asn Lys Ala Asp Leu
      165      170      175
Ala Asn Lys Arg Met Val Glu Tyr Glu Glu Ala Gln Ala Tyr Ala Asp
      180      185      190
Asp Asn Ser Leu Leu Phe Met Glu Thr Ser Ala Lys Thr Ala Met Asn
195      200      205
Val Asn Asp Leu Phe Leu Ala Ile Ala Xaa Glu Val Ala Lys Arg Val
210      215      220
Asn Pro Gln Asn Leu Gly Gly Ala Ala Gly Arg Ser Arg Gly Val Asp
225      230      235      240
Leu His Glu Gln Ser Gln Gln Asn Lys Ser Gln Cys Cys Ser Asn
      245      250      255

```

<210> 3856

<211> 826

<212> PRT

<213> Homo sapiens

<221> misc_feature
 <222> (1)...(817)
 <223> Xaa = any amino acid or nothing

<400> 3856

```

Leu Gly Leu Glu Ala Ala Ala Arg Pro Arg Pro Gly Gly Pro Ala Ala
 1           5           10           15
Met Gln Asp Gly Asn Phe Leu Leu Ser Ala Leu Gln Pro Glu Ala Gly
 20           25           30
Val Cys Ser Leu Ala Leu Pro Ser Asp Leu Gln Leu Asp Arg Arg Gly
 35           40           45
Ala Glu Gly Pro Glu Ala Glu Arg Leu Arg Ala Ala Arg Val Gln Glu
 50           55           60
Gln Val Arg Ala Arg Leu Leu Gln Leu Gly Gln Gln Pro Arg His Asn
 65           70           75           80
Gly Ala Ala Glu Pro Glu Pro Glu Ala Glu Thr Ala Arg Gly Thr Ser
 85           90           95
Arg Gly Gln Tyr His Thr Leu Gln Ala Gly Phe Ser Ser Arg Ser Gln
100          105          110
Gly Leu Ser Gly Asp Lys Thr Ser Gly Phe Arg Pro Ile Ala Lys Pro
115          120          125
Ala Tyr Ser Pro Ala Ser Trp Ser Ser Arg Ser Ala Val Asp Leu Ser
130          135          140
Cys Ser Arg Arg Leu Ser Ala His Asn Gly Gly Ser Ala Phe Gly
145          150          155          160
Ala Ala Gly Tyr Gly Gly Ala Gln Pro Thr Pro Pro Met Pro Thr Arg
165          170          175
Pro Val Ser Phe His Glu Arg Gly Gly Val Gly Ser Arg Ala Asp Tyr
180          185          190
Asp Thr Leu Ser Leu Arg Ser Leu Arg Leu Gly Pro Gly Gly Leu Asp
195          200          205
Asp Arg Tyr Ser Leu Val Ser Glu Gln Leu Glu Pro Ala Ala Thr Ser
210          215          220
Thr Tyr Arg Ala Phe Ala Tyr Glu Arg Gln Ala Ser Ser Ser Ser Ser
225          230          235          240
Arg Ala Gly Gly Leu Asp Trp Pro Glu Ala Thr Glu Val Ser Pro Ser
245          250          255
Arg Thr Ile Arg Ala Pro Ala Val Arg Thr Leu Gln Arg Phe Gln Ser
260          265          270
Ser His Arg Ser Arg Gly Val Gly Gly Ala Val Pro Gly Ala Val Leu
275          280          285
Glu Pro Val Ala Arg Ala Pro Ser Val Arg Ser Leu Ser Leu Ser Leu
290          295          300
Ala Asp Ser Gly His Leu Pro Asp Val His Gly Phe Asn Ser Tyr Gly
305          310          315          320
Ser His Arg Thr Leu Gln Arg Leu Ser Ser Gly Phe Asp Asp Ile Asp
325          330          335
Leu Pro Ser Ala Val Lys Tyr Leu Met Ala Ser Asp Pro Asn Leu Gln
340          345          350
Val Leu Gly Ala Ala Tyr Ile Gln His Lys Cys Tyr Ser Asp Ala Ala
355          360          365
Ala Lys Lys Gln Ala Arg Ser Leu Gln Ala Val Pro Arg Leu Val Lys
370          375          380
Leu Phe Asn His Ala Asn Gln Glu Val Gln Arg His Ala Thr Gly Ala
385          390          395          400
Met Arg Asn Leu Ile Tyr Asp Asn Ala Asp Asn Lys Leu Ala Leu Val
405          410          415
Glu Glu Asn Gly Ile Phe Glu Leu Leu Arg Thr Leu Arg Glu Gln Asp
420          425          430
Asp Glu Leu Arg Lys Asn Val Thr Gly Ile Leu Trp Asn Leu Ser Ser
435          440          445
Ser Asp His Leu Lys Asp Arg Leu Ala Lys Lys Thr Pro Leu Glu Gln

```

```

      450              455              460
Leu Thr Asp Leu Gly Val Xaa Ala Pro Leu Ser Gly Ala Gly Gly Pro
465              470              475              480
Pro Leu Ile Gln Gln Asn Ala Ser Glu Ala Glu Ile Phe Tyr Asn Ala
      485              490              495
Thr Gly Phe Pro Arg Asn Leu Ser Ser Ala Ser Gln Ala Thr Arg Gln
      500              505              510
Lys Met Arg Glu Cys His Gly Leu Val Asp Ala Leu Val Thr Ser Ile
      515              520              525
Asn His Ala Leu Asp Ala Gly Lys Cys Glu Asp Lys Ser Val Glu Asn
      530              535              540
Ala Val Cys Val Leu Arg Asn Leu Ser Tyr Arg Leu Tyr Asp Glu Met
545              550              555              560
Pro Pro Ser Ala Leu Gln Arg Leu Glu Gly Arg Gly Arg Arg Asp Leu
      565              570              575
Ala Gly Ala Pro Pro Gly Glu Val Val Gly Cys Phe Thr Pro Gln Ser
      580              585              590
Arg Arg Leu Arg Glu Leu Pro Leu Ala Ala Asp Ala Leu Thr Phe Ala
      595              600              605
Glu Val Ser Lys Asp Pro Lys Gly Leu Glu Trp Leu Trp Ser Pro Gln
      610              615              620
Ile Val Gly Leu Tyr Asn Arg Leu Leu Gln Arg Cys Glu Leu Asn Arg
625              630              635              640
His Thr Thr Glu Ala Ala Ala Gly Ala Leu Gln Asn Ile Thr Gly Gly
      645              650              655
Asp Pro Arg Gly Pro Gly Gly Leu Ser Arg Leu Ala Leu Glu Gln Glu
      660              665              670
Arg Ile Leu Asn Pro Leu Leu Asp Arg Val Arg Thr Ala Asp His His
      675              680              685
Gln Leu Arg Ser Leu Thr Gly Leu Ile Arg Asn Leu Ser Arg Asn Ala
      690              695              700
Arg Asn Lys Asp Glu Met Ser Thr Lys Val Val Ser His Leu Ile Glu
705              710              715              720
Lys Leu Pro Gly Ser Val Gly Glu Lys Ser Pro Pro Ala Glu Val Leu
      725              730              735
Val Asn Ile Ile Ala Val Phe Asn Asn Leu Gly Trp Leu Ala Ser Pro
      740              745              750
Ile Ala Leu Ala Arg Asp Leu Leu Tyr Phe Asp Gly Leu Arg Lys Leu
      755              760              765
Ile Phe Ile Lys Lys Lys Arg Asp Ser Pro Asp Ser Glu Lys Ser Ser
      770              775              780
Arg Ala Ala Ser Ser Leu Leu Ala Asn Leu Trp Gln Tyr Asn Lys Leu
785              790              795              800
His Arg Asp Phe Arg Ala Lys Gly Tyr Arg Lys Glu Asp Phe Leu Gly
      805              810              815
Pro
817

```

<210> 3857

<211> 279

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(277)

<223> Xaa = any amino acid or nothing

<400> 3857

```

Val Ala Val Thr Leu Leu Ser Gln Leu Pro Ser Ala Ile Gln Arg Thr
  1              5              10              15
Ala Ala Trp Glu Met Arg Ala Pro Leu Thr Phe Arg Val Pro Leu Ala

```

```

      20      25      30
Leu Asp Leu Ile Lys Pro Glu His Cys Thr Val Asn Val Asp Asn Ser
      35      40      45
Leu Ser Ile Pro Val Ile Ala Ala Glu Leu Val Val Arg Lys Pro Ser
      50      55      60
Glu Lys Gly Met Gln Gln Lys Lys Lys Thr Lys Asp Leu Gly Phe Arg
      65      70      75      80
Ala Gly Lys Glu Ser Lys Thr Glu Trp Arg Lys Xaa Gly Leu Gln Asp
      85      90      95
Met Ala Ser Gln Met Phe Ala Leu Pro Leu Lys Xaa Pro Val Thr Ala
      100      105      110
Ala Phe His Asp Ser Ser Met Pro Ser Ser Leu Leu Gln Ile Glu Met
      115      120      125
Glu Gln Leu Phe Leu Glu Ala Arg Leu Gln Pro Asp Ser Lys Ser Glu
      130      135      140
Ala Arg Arg Asn Gln Cys Asp Ser Met Leu Leu Arg Asn Gln Gln Leu
      145      150      155      160
Cys Ser Thr Cys Gln Glu Met Lys Met Val Gln Pro Arg Thr Met Lys
      165      170      175
Ile Pro Asp Asp Pro Lys Ala Ser Phe Glu Asn Cys Met Ser Tyr Arg
      180      185      190
Met Ser Leu His Gln Pro Lys Phe Gln Thr Thr Pro Glu Pro Phe His
      195      200      205
Asp Asp Ile Pro Thr Glu Asn Ile His Leu Gln Asn Leu Pro Ile Leu
      210      215      220
Gly Pro Arg Thr Ala Val Phe His Gly Leu Leu Thr Glu Ala Tyr Lys
      225      230      235      240
Thr Leu Lys Glu Arg Gln Arg Ser Ser Leu Pro Arg Lys Glu Pro Ile
      245      250      255
Gly Lys Thr Thr Glu Ala Val Ser Gly Arg Ser Ser Ser Pro Pro Arg
      260      265      270
Leu Pro Glu Arg Lys
      275      277

```

<210> 3858

<211> 1089

<212> PRT

<213> Homo sapiens

<400> 3858

```

Ser His Gln Glu Ile Glu Gln Asn Ser Ala Met Ala Pro Arg Lys Arg
1      5      10      15
Gly Gly Arg Gly Ile Ser Phe Ile Phe Cys Cys Phe Arg Asn Asn Asp
      20      25      30
His Pro Glu Ile Thr Tyr Arg Leu Arg Asn Asp Ser Asn Phe Ala Leu
      35      40      45
Gln Thr Met Glu Pro Ala Leu Pro Met Pro Pro Val Glu Glu Leu Asp
      50      55      60
Val Met Phe Ser Glu Leu Val Asp Glu Leu Asp Leu Thr Asp Lys His
      65      70      75      80
Arg Glu Ala Met Phe Ala Leu Pro Ala Glu Lys Lys Trp Gln Ile Tyr
      85      90      95
Cys Ser Lys Lys Lys Asp Gln Glu Glu Asn Lys Gly Ala Thr Ser Trp
      100      105      110
Pro Glu Phe Tyr Ile Asp Gln Leu Asn Ser Met Ala Ala Arg Lys Ser
      115      120      125
Leu Leu Ala Leu Glu Lys Glu Glu Glu Glu Glu Arg Ser Lys Thr Ile
      130      135      140
Glu Ser Leu Lys Thr Ala Leu Arg Thr Lys Pro Met Arg Phe Val Thr
      145      150      155      160
Arg Phe Ile Asp Leu Asp Gly Leu Ser Cys Ile Leu Asn Phe Leu Lys

```


				165					170					175	
Thr	Met	Asp	Tyr	Glu	Thr	Ser	Glu	Ser	Arg	Ile	His	Thr	Ser	Leu	Ile
				180					185					190	
Gly	Cys	Ile	Lys	Ala	Leu	Met	Asn	Asn	Ser	Gln	Gly	Arg	Ala	His	Val
			195				200					205			
Leu	Ala	His	Ser	Glu	Ser	Ile	Asn	Val	Ile	Ala	Gln	Ser	Leu	Ser	Thr
			210				215					220			
Glu	Asn	Ile	Lys	Thr	Lys	Val	Ala	Val	Leu	Glu	Ile	Leu	Gly	Ala	Val
			225			230				235				240	
Cys	Leu	Val	Pro	Gly	Gly	His	Lys	Lys	Val	Leu	Gln	Ala	Met	Leu	His
				245					250					255	
Tyr	Gln	Lys	Tyr	Ala	Ser	Glu	Arg	Thr	Arg	Phe	Gln	Thr	Leu	Ile	Asn
			260					265					270		
Asp	Leu	Asp	Lys	Ser	Thr	Gly	Arg	Tyr	Arg	Asp	Glu	Val	Ser	Leu	Lys
			275				280					285			
Thr	Ala	Ile	Met	Ser	Phe	Ile	Asn	Ala	Val	Leu	Ser	Gln	Gly	Ala	Gly
			290			295						300			
Val	Glu	Ser	Leu	Asp	Phe	Arg	Leu	His	Leu	Arg	Tyr	Glu	Phe	Leu	Met
			305			310				315				320	
Leu	Gly	Ile	His	Pro	Val	Met	Asp	Lys	Leu	Arg	Lys	His	Glu	Asn	Ser
				325					330					335	
Thr	Leu	Asp	Arg	His	Leu	Asp	Phe	Phe	Glu	Met	Leu	Arg	Asn	Glu	Asp
			340					345					350		
Glu	Leu	Glu	Phe	Ala	Lys	Arg	Phe	Glu	Leu	Val	His	Ile	Asp	Thr	Lys
			355				360					365			
Ser	Ala	Thr	Gln	Met	Phe	Glu	Leu	Thr	Arg	Lys	Arg	Leu	Thr	His	Ser
			370			375					380				
Glu	Ala	Tyr	Pro	His	Phe	Met	Ser	Ile	Leu	His	His	Cys	Leu	Gln	Met
			385			390				395				400	
Pro	Tyr	Lys	Arg	Ser	Gly	Asn	Thr	Val	Gln	Tyr	Trp	Leu	Leu	Leu	Asp
				405				410						415	
Arg	Ile	Ile	Gln	Gln	Ile	Val	Ile	Gln	Asn	Asp	Lys	Gly	Gln	Asp	Pro
			420					425					430		
Asp	Ser	Thr	Pro	Leu	Glu	Asn	Phe	Asn	Ile	Lys	Asn	Val	Val	Arg	Met
			435				440					445			
Leu	Val	Asn	Glu	Asn	Glu	Val	Lys	Gln	Trp	Lys	Glu	Gln	Ala	Glu	Lys
			450			455					460				
Met	Arg	Lys	Glu	His	Asn	Glu	Leu	Gln	Gln	Lys	Leu	Glu	Lys	Lys	Glu
			465			470				475				480	
Arg	Glu	Cys	Asp	Ala	Lys	Thr	Gln	Glu	Lys	Glu	Glu	Met	Met	Gln	Thr
				485				490						495	
Leu	Asn	Lys	Met	Lys	Glu	Lys	Leu	Glu	Lys	Glu	Thr	Thr	Glu	His	Lys
			500					505					510		
Gln	Val	Lys	Gln	Gln	Val	Ala	Asp	Leu	Thr	Ala	Gln	Leu	His	Glu	Leu
			515				520					525			
Ser	Arg	Arg	Ala	Val	Cys	Ala	Ser	Ile	Pro	Gly	Gly	Pro	Ser	Pro	Gly
			530			535					540				
Ala	Pro	Gly	Gly	Pro	Phe	Pro	Ser	Ser	Val	Pro	Gly	Ser	Leu	Leu	Pro
			545			550				555				560	
Pro	Pro	Pro	Pro	Pro	Pro	Leu	Pro	Gly	Gly	Met	Leu	Pro	Pro	Pro	Pro
				565				570						575	
Pro	Pro	Leu	Pro	Pro	Gly	Gly	Pro	Pro	Pro	Pro	Pro	Gly	Pro	Pro	Pro
			580				585					590			
Leu	Gly	Ala	Ile	Met	Pro	Pro	Pro	Gly	Ala	Pro	Met	Gly	Leu	Ala	Leu
			595				600					605			
Lys	Lys	Lys	Ser	Ile	Pro	Gln	Pro	Thr	Asn	Ala	Leu	Lys	Ser	Phe	Asn
			610			615					620				
Trp	Ser	Lys	Leu	Pro	Glu	Asn	Lys	Leu	Glu	Gly	Thr	Val	Trp	Thr	Glu
			625			630				635				640	
Ile	Asp	Asp	Thr	Lys	Val	Phe	Lys	Ile	Leu	Asp	Leu	Glu	Asp	Leu	Glu
				645				650						655	
Arg	Thr	Phe	Ser	Ala	Tyr	Gln	Arg	Gln	Gln	Asp	Phe	Phe	Val	Asn	Ser
			660					665					670		
Asn	Ser	Lys	Gln	Lys	Glu	Ala	Asp	Ile	Asp	Asp	Thr	Leu	Ser	Ser	

675	680	685
Lys Leu Lys Val Lys Glu Leu Ser Val Ile Asp Gly Arg Arg Ala Gln		
690	695	700
Asn Cys Asn Ile Leu Leu Ser Arg Leu Lys Leu Ser Asn Asp Glu Ile		
705	710	715
Lys Arg Ala Ile Leu Thr Met Asp Glu Gln Glu Asp Leu Pro Lys Asp		
	725	730
Met Leu Glu Gln Leu Leu Lys Phe Val Pro Glu Lys Ser Asp Ile Asp		
	740	745
Leu Leu Glu Glu His Lys His Glu Leu Asp Arg Met Ala Lys Ala Asp		
	755	760
Arg Phe Leu Phe Glu Met Ser Arg Ile Asn His Tyr Gln Gln Arg Leu		
	770	775
Gln Ser Leu Tyr Phe Lys Lys Lys Phe Ala Glu Arg Val Ala Glu Val		
785	790	795
Lys Pro Lys Val Glu Ala Ile Arg Ser Gly Ser Glu Glu Val Phe Arg		
	805	810
Ser Gly Ala Leu Lys Gln Leu Leu Glu Val Val Leu Ala Phe Gly Asn		
	820	825
Tyr Met Asn Lys Gly Gln Arg Gly Asn Ala Tyr Gly Phe Lys Ile Ser		
	835	840
Ser Leu Asn Lys Ile Ala Asp Thr Lys Ser Ser Ile Asp Lys Asn Ile		
	850	855
Thr Leu Leu His Tyr Leu Ile Thr Ile Val Glu Asn Lys Tyr Pro Ser		
865	870	875
Val Leu Asn Leu Asn Glu Glu Leu Arg Asp Ile Pro Gln Ala Ala Lys		
	885	890
Val Asn Met Thr Glu Leu Asp Lys Glu Ile Ser Thr Leu Arg Ser Gly		
	900	905
Leu Lys Ala Val Glu Thr Glu Leu Glu Tyr Gln Lys Ser Gln Pro Pro		
	915	920
Gln Pro Gly Asp Lys Phe Val Ser Val Val Ser Gln Phe Ile Thr Val		
	930	935
Ala Ser Phe Ser Phe Ser Asp Val Glu Asp Leu Leu Ala Glu Ala Lys		
945	950	955
Asp Leu Phe Thr Lys Ala Val Lys His Phe Gly Glu Glu Ala Gly Lys		
	965	970
Ile Gln Pro Asp Glu Phe Phe Gly Ile Phe Asp Gln Phe Leu Gln Ala		
	980	985
Val Ser Glu Ala Lys Gln Glu Asn Glu Asn Met Arg Lys Lys Lys Glu		
	995	1000
Glu Glu Glu Arg Arg Ala Arg Met Glu Ala Gln Leu Lys Glu Gln Arg		
	1010	1015
Glu Arg Glu Arg Lys Met Arg Lys Ala Lys Glu Asn Ser Glu Glu Ser		
1025	1030	1035
Gly Glu Phe Asp Asp Leu Val Ser Ala Leu Arg Ser Gly Glu Val Phe		
	1045	1050
Asp Lys Asp Leu Ser Lys Leu Lys Arg Asn Arg Lys Arg Ile Thr Asn		
	1060	1065
Gln Met Thr Asp Ser Ser Arg Glu Arg Pro Ile Thr Lys Leu Asn Phe		
	1075	1080
		1085
		1088

<210> 3859

<211> 380

<212> PRT

<213> Homo sapiens

<400> 3859

Arg Val Glu His Leu Ser Glu Phe Leu Val Asp Ile Lys Pro Ser Leu

```

1      5      10      15
Thr Phe Asp Val Ile Pro Leu Leu Asp Pro Tyr Gly Pro Ala Gly Ser
20      25      30
Asp Pro Ser Leu Glu Phe Leu Val Ser Glu Glu Thr Tyr Arg Gly
35      40      45
Gly Met Ala Ile Asn Arg Phe Arg Leu Glu Asn Asp Leu Glu Glu Leu
50      55      60
Ala Leu Tyr Gln Ile Gln Leu Leu Lys Asp Leu Arg His Thr Glu Asn
65      70      75      80
Glu Glu Asp Lys Val Ser Ser Ser Ser Phe Arg Gln Arg Met Leu Gly
85      90      95
Asn Leu Leu Arg Pro Pro Tyr Glu Arg Pro Glu Leu Pro Thr Cys Leu
100     105     110
Tyr Val Ile Gly Leu Thr Gly Ile Ser Gly Ser Gly Lys Ser Ser Ile
115     120     125
Ala Gln Arg Leu Lys Gly Leu Gly Ala Phe Val Ile Asp Ser Asp His
130     135     140
Leu Gly His Arg Ala Tyr Ala Pro Gly Gly Pro Ala Tyr Gln Pro Val
145     150     155     160
Val Glu Ala Phe Gly Thr Asp Ile Leu His Lys Asp Gly Ile Ile Asn
165     170     175
Arg Lys Val Leu Gly Ser Arg Val Phe Gly Asn Lys Lys Gln Leu Lys
180     185     190
Ile Leu Thr Asp Ile Met Trp Pro Ile Ile Ala Lys Leu Ala Arg Glu
195     200     205
Glu Met Asp Arg Ala Val Ala Glu Gly Lys Arg Val Cys Val Ile Asp
210     215     220
Ala Ala Val Leu Leu Glu Ala Gly Trp Gln Asn Leu Val His Glu Val
225     230     235     240
Trp Thr Ala Val Ile Pro Glu Thr Glu Ala Val Arg Arg Ile Val Glu
245     250     255
Arg Asp Gly Leu Ser Glu Ala Ala Ala Gln Ser Arg Leu Gln Ser Gln
260     265     270
Met Ser Gly Gln Gln Leu Val Glu Gln Ser His Val Val Leu Ser Thr
275     280     285
Cys Gly Ser Arg Ile Ser Pro Asn Ala Arg Trp Arg Lys Pro Gly Pro
290     295     300
Ser Cys Arg Ser Ala Phe Pro Arg Leu Ile Arg Pro Ser Thr Glu Lys
305     310     315     320
Phe Ser Val Gly Pro Asp Trp Leu Leu Glu Leu Thr Ser Asp Pro Val
325     330     335
Val Arg Arg Asn Gly Gly Leu Asp Ala His Pro Gly Ser Gly Pro Glu
340     345     350
Val Gln Ala Ile Leu Cys Arg Thr Trp Pro Gly Leu Val Asp Thr Gly
355     360     365
Ser Leu Pro Asn Thr Leu Val Phe Gly Gln His
370     375     379

```

<210> 3860

<211> 1294

<212> PRT

<213> Homo sapiens

<400> 3860

```

Met Gly Gln Lys Ser Val Gly Ala Ser Tyr Val Gln Ile Pro Leu Val
1      5      10      15
Pro Pro Leu Ser Arg His Pro Lys Gly Leu Gly His Glu Asp Arg Trp
20      25      30
Ser Ser Tyr Cys Leu Ser Ser Leu Ala Ala Gln Asn Ile Cys Thr Ser
35      40      45
Lys Leu His Cys Pro Ala Ala Pro Glu His Thr Asp Pro Ser Glu Pro

```

50	55	60			
Arg Gly Ser Val Ser Cys Cys Ser Leu Leu Arg Gly Leu Ser Ser Gly					
65	70	75	80		
Trp Ser Ser Pro Leu Leu Pro Ala Pro Val Cys Asn Pro Asn Lys Ala					
	85	90	95		
Ile Phe Thr Val Asp Ala Lys Thr Thr Glu Ile Leu Val Ala Asn Asp					
	100	105	110		
Lys Ala Cys Gly Leu Leu Gly Tyr Ser Ser Gln Asp Leu Ile Gly Gln					
	115	120	125		
Lys Leu Thr Gln Phe Phe Leu Arg Ser Asp Ser Asp Val Val Glu Ala					
	130	135	140		
Leu Ser Glu Glu His Met Glu Ala Asp Gly His Ala Ala Val Val Phe					
145	150	155	160		
Gly Thr Val Val Asp Ile Ile Ser Arg Ser Gly Glu Lys Ile Pro Val					
	165	170	175		
Ser Val Trp Met Lys Arg Met Arg Gln Glu Arg Arg Leu Cys Cys Val					
	180	185	190		
Val Val Leu Glu Pro Val Glu Arg Val Ser Thr Trp Val Ala Phe Gln					
	195	200	205		
Ser Asp Gly Thr Val Thr Ser Cys Asp Ser Leu Phe Ala His Leu His					
	210	215	220		
Gly Tyr Val Ser Gly Glu Asp Val Ala Gly Gln His Ile Thr Asp Leu					
225	230	235	240		
Ile Pro Ser Val Gln Leu Pro Pro Ser Gly Gln His Ile Pro Lys Asn					
	245	250	255		
Leu Lys Ile Gln Arg Ser Val Gly Arg Ala Arg Asp Gly Thr Thr Phe					
	260	265	270		
Pro Leu Ser Leu Lys Leu Lys Ser Gln Pro Ser Ser Glu Glu Ala Thr					
	275	280	285		
Thr Gly Glu Ala Ala Pro Val Ser Gly Tyr Arg Ala Ser Val Trp Val					
	290	295	300		
Phe Cys Thr Ile Ser Gly Leu Ile Thr Leu Leu Pro Asp Gly Thr Ile					
305	310	315	320		
His Gly Ile Asn His Ser Phe Ala Leu Thr Leu Phe Gly Tyr Gly Lys					
	325	330	335		
Thr Glu Leu Leu Gly Lys Asn Ile Thr Phe Leu Ile Pro Gly Phe Tyr					
	340	345	350		
Ser Tyr Met Asp Leu Ala Tyr Asn Ser Ser Leu Gln Leu Pro Asp Leu					
	355	360	365		
Ala Ser Cys Leu Asp Val Gly Asn Glu Ser Gly Cys Gly Glu Arg Thr					
	370	375	380		
Leu Asp Pro Trp Gln Gly Gln Asp Pro Ala Glu Gly Gly Gln Asp Pro					
385	390	395	400		
Arg Ile Asn Val Val Leu Ala Gly Gly His Val Val Pro Arg Asp Glu					
	405	410	415		
Ile Arg Lys Leu Met Glu Ser Gln Asp Ile Phe Thr Gly Thr Gln Thr					
	420	425	430		
Glu Leu Ile Ala Gly Gly Gln Leu Leu Ser Cys Leu Ser Pro Gln Pro					
	435	440	445		
Ala Pro Gly Val Asp Asn Val Pro Glu Gly Ser Leu Pro Val His Gly					
	450	455	460		
Glu Gln Ala Leu Pro Lys Asp Gln Gln Ile Thr Ala Leu Gly Arg Glu					
465	470	475	480		
Glu Pro Val Ala Ile Glu Ser Pro Gly Gln Asp Leu Leu Gly Glu Ser					
	485	490	495		
Arg Ser Glu Pro Val Asp Val Lys Pro Phe Ala Ser Cys Glu Asp Ser					
	500	505	510		
Glu Ala Pro Val Pro Ala Glu Asp Gly Gly Ser Asp Ala Gly Met Cys					
	515	520	525		
Gly Leu Cys Gln Lys Ala Gln Leu Glu Arg Met Gly Val Ser Gly Pro					
	530	535	540		
Ser Gly Ser Asp Leu Trp Ala Gly Ala Ala Val Ala Lys Pro Gln Ala					
545	550	555	560		
Lys Gly Gln Leu Ala Gly Gly Ser Leu Leu Met His Cys Pro Cys Tyr					

5623

1075	1080	1085
Leu Arg Leu Lys Asp Ile Ile His Arg Asp Ile Lys Asp Glu Asn Ile		
1090	1095	1100
Val Ile Ala Glu Asp Phe Thr Ile Lys Leu Ile Asp Phe Gly Ser Ala		
1105	1110	1115
Ala Tyr Leu Glu Arg Gly Lys Leu Phe Tyr Thr Phe Cys Gly Thr Ile		
1125	1130	1135
Glu Tyr Cys Ala Pro Glu Val Leu Met Gly Asn Pro Tyr Arg Gly Pro		
1140	1145	1150
Glu Leu Glu Met Trp Ser Leu Gly Val Thr Leu Tyr Thr Leu Val Phe		
1155	1160	1165
Glu Glu Asn Pro Phe Cys Glu Leu Glu Glu Thr Val Glu Ala Ala Ile		
1170	1175	1180
His Pro Pro Tyr Leu Val Ser Lys Glu Leu Met Ser Leu Val Ser Gly		
1185	1190	1195
Leu Leu Gln Pro Val Pro Glu Arg Arg Thr Thr Leu Glu Lys Leu Val		
1205	1210	1215
Thr Asp Pro Trp Val Thr Gln Pro Val Asn Leu Ala Asp Tyr Thr Trp		
1220	1225	1230
Glu Glu Val Phe Arg Val Asn Lys Pro Glu Ser Gly Val Leu Ser Ala		
1235	1240	1245
Ala Ser Leu Glu Met Gly Asn Arg Ser Leu Ser Asp Val Ala Gln Ala		
1250	1255	1260
Gln Glu Leu Cys Gly Gly Pro Val Pro Gly Glu Ala Pro Asn Gly Gln		
1265	1270	1275
Gly Cys Leu His Pro Gly Asp Pro Arg Leu Leu Thr Ser		
1285	1290	1293

<210> 3861
 <211> 1294
 <212> PRT
 <213> Homo sapiens.

<400> 3861

Met Gly Gln Lys Ser Val Gly Ala Ser Tyr Val Gln Ile Pro Leu Val		
1	5	10
Pro Pro Leu Ser Arg His Pro Lys Gly Leu Gly His Glu Asp Arg Trp		
20	25	30
Ser Ser Tyr Cys Leu Ser Ser Leu Ala Ala Gln Asn Ile Cys Thr Ser		
35	40	45
Lys Leu His Cys Pro Ala Ala Pro Glu His Thr Asp Pro Ser Glu Pro		
50	55	60
Arg Gly Ser Val Ser Cys Cys Ser Leu Leu Arg Gly Leu Ser Ser Gly		
65	70	75
Trp Ser Ser Pro Leu Leu Pro Ala Pro Val Cys Asn Pro Asn Lys Ala		
85	90	95
Ile Phe Thr Val Asp Ala Lys Thr Thr Glu Ile Leu Val Ala Asn Asp		
100	105	110
Lys Ala Cys Gly Leu Leu Gly Tyr Ser Ser Gln Asp Leu Ile Gly Gln		
115	120	125
Lys Leu Thr Gln Phe Phe Leu Arg Ser Asp Ser Asp Val Val Glu Ala		
130	135	140
Leu Ser Glu Glu His Met Glu Ala Asp Gly His Ala Ala Val Val Phe		
145	150	155
Gly Thr Val Val Asp Ile Ile Ser Arg Ser Gly Glu Lys Ile Pro Val		
165	170	175
Ser Val Trp Met Lys Arg Met Arg Gln Glu Arg Arg Leu Cys Cys Val		
180	185	190
Val Val Leu Glu Pro Val Glu Arg Val Ser Thr Trp Val Ala Phe Gln		
195	200	205
Ser Asp Gly Thr Val Thr Ser Cys Asp Ser Leu Phe Ala His Leu His		

210	215	220
Gly Tyr Val Ser Gly Glu Asp Val Ala Gly Gln His Ile Thr Asp Leu		
225	230	235
Ile Pro Ser Val Gln Leu Pro Pro Ser Gly Gln His Ile Pro Lys Asn		
	245	250
Leu Lys Ile Gln Arg Ser Val Gly Arg Ala Arg Asp Gly Thr Thr Phe		
	260	265
Pro Leu Ser Leu Lys Leu Lys Ser Gln Pro Ser Ser Glu Glu Ala Thr		
	275	280
Thr Gly Glu Ala Ala Pro Val Ser Gly Tyr Arg Ala Ser Val Trp Val		
	290	295
Phe Cys Thr Ile Ser Gly Leu Ile Thr Leu Leu Pro Asp Gly Thr Ile		
305	310	315
His Gly Ile Asn His Ser Phe Ala Leu Thr Leu Phe Gly Tyr Gly Lys		
	325	330
Thr Glu Leu Leu Gly Lys Asn Ile Thr Phe Leu Ile Pro Gly Phe Tyr		
	340	345
Ser Tyr Met Asp Leu Ala Tyr Asn Ser Ser Leu Gln Leu Pro Asp Leu		
	355	360
Ala Ser Cys Leu Asp Val Gly Asn Glu Ser Gly Cys Gly Glu Arg Thr		
	370	375
Leu Asp Pro Trp Gln Gly Gln Asp Pro Ala Glu Gly Gly Gln Asp Pro		
385	390	395
Arg Ile Asn Val Val Leu Ala Gly Gly His Val Val Pro Arg Asp Glu		
	405	410
Ile Arg Lys Leu Met Glu Ser Gln Asp Ile Phe Thr Gly Thr Gln Thr		
	420	425
Glu Leu Ile Ala Gly Gly Gln Leu Leu Ser Cys Leu Ser Pro Gln Pro		
	435	440
Ala Pro Gly Val Asp Asn Val Pro Glu Gly Ser Leu Pro Val His Gly		
	450	455
Glu Gln Ala Leu Pro Lys Asp Gln Gln Ile Thr Ala Leu Gly Arg Glu		
465	470	475
Glu Pro Val Ala Ile Glu Ser Pro Gly Gln Asp Leu Leu Gly Glu Ser		
	485	490
Arg Ser Glu Pro Val Asp Val Lys Pro Phe Ala Ser Cys Glu Asp Ser		
	500	505
Glu Ala Pro Val Pro Ala Glu Asp Gly Gly Ser Asp Ala Gly Met Cys		
	515	520
Gly Leu Cys Gln Lys Ala Gln Leu Glu Arg Met Gly Val Ser Gly Pro		
	530	535
Ser Gly Ser Asp Leu Trp Ala Gly Ala Ala Val Ala Lys Pro Gln Ala		
545	550	555
Lys Gly Gln Leu Ala Gly Gly Ser Leu Leu Met His Cys Pro Cys Tyr		
	565	570
Gly Ser Glu Trp Gly Leu Trp Trp Arg Ser Gln Asp Leu Ala Pro Ser		
	580	585
Pro Ser Gly Met Ala Gly Leu Ser Phe Gly Thr Pro Thr Leu Asp Glu		
	595	600
Pro Trp Leu Gly Val Glu Asn Asp Arg Glu Glu Leu Gln Thr Cys Leu		
	610	615
Ile Lys Glu Gln Leu Ser Gln Leu Ser Leu Ala Gly Ala Leu Asp Val		
625	630	635
Pro His Ala Glu Leu Val Pro Thr Glu Cys Gln Ala Val Thr Ala Pro		
	645	650
Val Ser Ser Cys Asp Leu Gly Gly Arg Asp Leu Cys Gly Gly Cys Thr		
	660	665
Gly Ser Ser Ser Ala Cys Tyr Ala Leu Ala Thr Asp Leu Pro Gly Gly		
	675	680
Leu Glu Ala Val Glu Ala Gln Glu Val Asp Val Asn Ser Phe Ser Trp		
	690	695
Asn Leu Lys Glu Leu Phe Ser Asp Gln Thr Asp Gln Thr Ser Ser		
705	710	715
Asn Cys Ser Cys Ala Thr Ser Glu Leu Arg Glu Thr Pro Ser Ser Leu		

5626

1235 1240 1245
 Ala Ser Leu Glu Met Gly Asn Arg Ser Leu Ser Asp Val Ala Gln Ala
 1250 1255 1260
 Gln Glu Leu Cys Gly Gly Pro Val Pro Gly Glu Ala Pro Asn Gly Gln
 1265 1270 1275 1280
 Gly Cys Leu His Pro Gly Asp Pro Arg Leu Leu Thr Ser
 1285 1290 1293

<210> 3862
 <211> 557
 <212> PRT
 <213> Homo sapiens

<400> 3862
 Thr Met Asp Arg Ser Lys Arg Asn Ser Ile Ala Gly Phe Pro Pro Arg
 1 5 10 15
 Val Glu Arg Leu Glu Glu Phe Glu Gly Gly Gly Glu Gly Asn
 20 25 30
 Val Ser Gln Val Gly Arg Val Trp Pro Ser Ser Tyr Arg Ala Leu Ile
 35 40 45
 Ser Ala Phe Phe Arg Leu Thr Arg Leu Asp Asp Phe Thr Cys Glu Lys
 50 55 60
 Ile Gly Ser Gly Phe Phe Ser Glu Val Phe Lys Val Arg His Arg Ala
 65 70 75 80
 Ser Gly Gln Val Met Ala Leu Lys Met Asn Thr Leu Ser Ser Asn Arg
 85 90 95
 Ala Asn Met Leu Lys Glu Val Gln Leu Met Asn Arg Leu Ser His Pro
 100 105 110
 Asn Ile Leu Arg Tyr Ile Asn Ser Gly Asn Leu Glu Gln Leu Leu Asp
 115 120 125
 Ser Asn Leu His Leu Pro Trp Thr Val Arg Val Lys Leu Ala Tyr Asp
 130 135 140
 Ile Ala Val Gly Leu Ser Tyr Leu His Phe Lys Gly Ile Phe His Arg
 145 150 155 160
 Asp Leu Thr Ser Lys Asn Cys Leu Ile Lys Arg Asp Glu Asn Gly Tyr
 165 170 175
 Ser Ala Val Val Ala Asp Phe Gly Leu Ala Glu Lys Ile Pro Asp Val
 180 185 190
 Ser Met Gly Ser Glu Lys Leu Ala Val Val Gly Ser Pro Phe Trp Met
 195 200 205
 Ala Pro Glu Val Leu Arg Asp Glu Pro Tyr Asn Glu Lys Ala Asp Val
 210 215 220
 Phe Ser Tyr Gly Ile Ile Leu Cys Glu Ile Ile Ala Arg Ile Gln Ala
 225 230 235 240
 Asp Pro Asp Tyr Leu Pro Arg Thr Glu Asn Phe Gly Leu Asp Tyr Asp
 245 250 255
 Ala Phe Gln His Met Val Gly Asp Cys Pro Pro Asp Phe Leu Gln Leu
 260 265 270
 Thr Phe Asn Cys Cys Asn Met Asp Pro Lys Leu Arg Pro Ser Phe Val
 275 280 285
 Glu Ile Gly Lys Thr Leu Glu Glu Ile Leu Ser Arg Leu Gln Glu Glu
 290 295 300
 Glu Gln Glu Arg Asp Arg Lys Leu Gln Pro Thr Ala Arg Gly Leu Leu
 305 310 315 320
 Glu Lys Ala Pro Gly Val Lys Arg Leu Ser Ser Leu Asp Asp Lys Ile
 325 330 335
 Pro His Lys Ser Pro Cys Pro Arg Arg Thr Ile Trp Leu Ser Arg Ser
 340 345 350
 Gln Ser Asp Ile Phe Ser Arg Lys Pro Pro Arg Thr Val Ser Val Leu
 355 360 365
 Asp Pro Tyr Tyr Arg Pro Arg Asp Gly Ala Ala Arg Thr Pro Lys Val

370	375	380
Asn Pro Phe Ser Ala	Arg Gln Asp Leu Met Gly	Gly Lys Ile Lys Phe
385	390	395
Phe Asp Leu Pro Ser	Lys Ser Val Ile Ser	Leu Val Phe Asp Leu Asp
405	410	415
Ala Pro Gly Pro Gly	Thr Met Pro Leu Ala	Asp Trp Gln Glu Pro Leu
420	425	430
Ala Pro Pro Ile Arg	Arg Trp Arg Ser Leu	Pro Gly Ser Pro Glu Phe
435	440	445
Leu His Gln Glu Ala	Cys Pro Phe Val Gly	Arg Glu Glu Ser Leu Ser
450	455	460
Asp Gly Pro Pro Pro	Arg Leu Ser Ser Leu	Lys Tyr Arg Val Lys Glu
465	470	475
Ile Pro Pro Phe Arg	Ala Ser Ala Leu Pro	Ala Ala Gln Ala His Glu
485	490	495
Ala Met Asp Cys Ser	Ile Leu Gln Glu Glu	Asn Gly Phe Gly Ser Arg
500	505	510
Pro Gln Gly Thr Ser	Pro Cys Pro Ala Gly	Ala Ser Glu Glu Met Glu
515	520	525
Val Glu Glu Arg Pro	Ala Gly Ser Thr Pro	Ala Thr Phe Ser Thr Ser
530	535	540
Gly Ile Gly Leu Gln	Thr Gln Gly Lys Gln	Asp Gly
545	550	555
		556

<210> 3863

<211> 557

<212> PRT

<213> Homo sapiens

<400> 3863

Thr Met Asp Arg Ser	Lys Arg Asn Ser	Ile Ala Gly Phe	Pro Pro Arg
1	5	10	15
Val Glu Arg Leu Glu	Glu Phe Glu Gly	Gly Gly Gly Glu	Gly Asn
20	25	30	
Val Ser Gln Val Gly	Arg Val Trp Pro	Ser Ser Tyr Arg	Ala Leu Ile
35	40	45	
Ser Ala Phe Phe Arg	Leu Thr Arg Leu	Asp Asp Phe Thr	Cys Glu Lys
50	55	60	
Ile Gly Ser Gly Phe	Phe Ser Glu Val	Phe Lys Val Arg	His Arg Ala
65	70	75	80
Ser Gly Gln Val Met	Ala Leu Lys Met	Asn Thr Leu Ser	Ser Asn Arg
85	90	95	
Ala Asn Met Leu Lys	Glu Val Gln Leu	Met Asn Arg Leu	Ser His Pro
100	105	110	
Asn Ile Leu Arg Tyr	Ile Asn Ser Gly	Asn Leu Glu Gln	Leu Leu Asp
115	120	125	
Ser Asn Leu His Leu	Pro Trp Thr Val	Arg Val Lys Leu	Ala Tyr Asp
130	135	140	
Ile Ala Val Gly Leu	Ser Tyr Leu His	Phe Lys Gly Ile	Phe His Arg
145	150	155	160
Asp Leu Thr Ser Lys	Asn Cys Leu Ile	Lys Arg Asp Glu	Asn Gly Tyr
165	170	175	
Ser Ala Val Val Ala	Asp Phe Gly Leu	Ala Glu Lys Ile	Pro Asp Val
180	185	190	
Ser Met Gly Ser Glu	Lys Leu Ala Val	Val Gly Ser Pro	Phe Trp Met
195	200	205	
Ala Pro Glu Val Leu	Arg Asp Glu Pro	Tyr Asn Glu Lys	Ala Asp Val
210	215	220	
Phe Ser Tyr Gly Ile	Ile Leu Cys Glu	Ile Ile Ala Arg	Ile Gln Ala
225	230	235	240
Asp Pro Asp Tyr Leu	Pro Arg Thr Glu	Asn Phe Gly Leu	Asp Tyr Asp

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                245                250                255
Ala Phe Gln His Met Val Gly Asp Cys Pro Pro Asp Phe Leu Gln Leu
                260                265                270
Thr Phe Asn Cys Cys Asn Met Asp Pro Lys Leu Arg Pro Ser Phe Val
                275                280                285
Glu Ile Gly Lys Thr Leu Glu Ile Leu Ser Arg Leu Gln Glu Glu
                290                295                300
Glu Gln Glu Arg Asp Arg Lys Leu Gln Pro Thr Ala Arg Gly Leu Leu
305                310                315                320
Glu Lys Ala Pro Gly Val Lys Arg Leu Ser Ser Leu Asp Asp Lys Ile
                325                330                335
Pro His Lys Ser Pro Cys Pro Arg Arg Thr Ile Trp Leu Ser Arg Ser
                340                345                350
Gln Ser Asp Ile Phe Ser Arg Lys Pro Pro Arg Thr Val Ser Val Leu
                355                360                365
Asp Pro Tyr Tyr Arg Pro Arg Asp Gly Ala Ala Arg Thr Pro Lys Val
370                375                380
Asn Pro Phe Ser Ala Arg Gln Asp Leu Met Gly Gly Lys Ile Lys Phe
385                390                395                400
Phe Asp Leu Pro Ser Lys Ser Val Ile Ser Leu Val Phe Asp Leu Asp
                405                410                415
Ala Pro Gly Pro Gly Thr Met Pro Leu Ala Asp Trp Gln Glu Pro Leu
                420                425                430
Ala Pro Pro Ile Arg Arg Trp Arg Ser Leu Pro Gly Ser Pro Glu Phe
435                440                445
Leu His Gln Glu Ala Cys Pro Phe Val Gly Arg Glu Glu Ser Leu Ser
450                455                460
Asp Gly Pro Pro Pro Arg Leu Ser Ser Leu Lys Tyr Arg Val Lys Glu
465                470                475                480
Ile Pro Pro Phe Arg Ala Ser Ala Leu Pro Ala Ala Gln Ala His Glu
                485                490                495
Ala Met Asp Cys Ser Ile Leu Gln Glu Glu Asn Gly Phe Gly Ser Arg
500                505                510
Pro Gln Gly Thr Ser Pro Cys Pro Ala Gly Ala Ser Glu Glu Met Glu
515                520                525
Val Glu Glu Arg Pro Ala Gly Ser Thr Pro Ala Thr Phe Ser Thr Ser
530                535                540
Gly Ile Gly Leu Gln Thr Gln Gly Lys Gln Asp Gly
545                550                555 556

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<210> 3864

<211> 305

<212> PRT

<213> Homo sapiens

<400> 3864

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Ser Trp Asn Met Asp Ser Asp Ser Cys Ala Ala Ala Phe His Pro Glu
1          5          10          15
Glu Tyr Ser Pro Ser Cys Lys Arg Arg Arg Thr Val Glu Asp Phe Asn
20          25          30
Lys Phe Cys Thr Phe Val Leu Ala Tyr Ala Gly Tyr Ile Pro Tyr Pro
35          40          45
Lys Glu Glu Leu Pro Leu Arg Ser Ser Pro Ser Pro Ala Asn Ser Thr
50          55          60
Ala Gly Thr Ile Asp Ser Asp Gly Trp Asp Ala Gly Phe Ser Asp Ile
65          70          75          80
Ala Ser Ser Val Pro Leu Pro Val Ser Asp Arg Cys Phe Ser His Leu
85          90          95
Gln Pro Thr Leu Leu Gln Arg Ala Lys Pro Ser Asn Phe Leu Leu Asp
100         105         110
Arg Lys Lys Thr Asp Lys Leu Lys Lys Lys Lys Arg Lys Arg Arg

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115	120	125
Asp Ser Asp Ala Pro Gly Lys Glu Gly Tyr Arg Gly Gly Leu Leu Lys		
130	135	140
Leu Glu Ala Ala Asp Pro Tyr Val Glu Thr Pro Thr Ser Pro Thr Leu		
145	150	155
Gln Asp Ile Pro Gln Ala Pro Ser Asp Pro Cys Ser Gly Trp Asp Ser		
165	170	175
Asp Thr Pro Ser Ser Gly Ser Cys Ala Thr Val Ser Pro Asp Gln Val		
180	185	190
Lys Glu Ile Lys Thr Glu Gly Lys Arg Thr Ile Val Arg Gln Glu Ala		
195	200	205
Gln Leu Met Ala Arg Asn Asp Gly Asn Phe Ser Ser Leu Leu Glu Ser		
210	215	220
Ile Phe Pro Ser Asp Asp Ser Trp Asp Leu Val Thr Cys Phe Cys		
225	230	235
Met Lys Pro Phe Ala Gly Arg Pro Met Ile Glu Cys Asn Glu Cys His		
245	250	255
Thr Trp Ile His Leu Ser Cys Ala Lys Ile Arg Lys Ser Asn Val Pro		
260	265	270
Glu Val Phe Val Cys Gln Lys Cys Arg Asp Ser Lys Phe Asp Ile Arg		
275	280	285
Arg Ser Asn Arg Ser Arg Thr Gly Ser Arg Lys Leu Phe Leu Asp		
290	295	300
		303

<210> 3865

<211> 1193

<212> PRT

<213> Homo sapiens

<400> 3865

Gln Glu Arg Leu Arg Ser Arg Ser Arg Pro Asp Arg Ala Ala Arg Glu		
1	5	10
Ala Gly Ser Ala Arg Gly Arg Gln Pro Lys Arg Thr Glu Arg Val Glu		
20	25	30
Gln Phe Leu Thr Ile Ala Arg Arg Arg Gly Arg Arg Ser Met Pro Val		
35	40	45
Ser Leu Glu Asp Ser Gly Glu Pro Thr Ser Cys Pro Ala Thr Asp Ala		
50	55	60
Glu Thr Ala Ser Glu Gly Ser Val Glu Ser Ala Ser Glu Thr Arg Ser		
65	70	75
Gly Pro Gln Ser Ala Ser Thr Ala Val Lys Glu Arg Pro Ala Ser Ser		
85	90	95
Glu Lys Val Lys Gly Gly Asp Asp His Asp Asp Thr Ser Asp Ser Asp		
100	105	110
Ser Asp Gly Leu Thr Leu Lys Glu Leu Gln Asn Arg Leu Arg Arg Lys		
115	120	125
Arg Glu Gln Glu Pro Thr Glu Arg Pro Leu Lys Gly Ile Gln Ser Arg		
130	135	140
Leu Arg Lys Lys Arg Arg Glu Glu Gly Pro Ala Glu Thr Val Gly Ser		
145	150	155
Glu Ala Ser Asp Thr Val Glu Gly Val Leu Pro Ser Lys Gln Glu Pro		
165	170	175
Glu Asn Asp Gln Gly Val Val Ser Gln Ala Gly Lys Asp Asp Arg Glu		
180	185	190
Ser Lys Leu Glu Gly Lys Ala Ala Gln Asp Ile Lys Asp Glu Glu Pro		
195	200	205
Gly Asp Leu Gly Arg Pro Lys Pro Glu Cys Glu Gly Tyr Asp Pro Asn		
210	215	220
Ala Leu Tyr Cys Ile Cys Arg Gln Pro His Asn Asn Arg Phe Met Ile		
225	230	235
Cys Cys Asp Arg Cys Glu Glu Trp Phe His Gly Asp Cys Val Gly Ile		
		240

5631

755	760	765
Leu Ser Thr Trp Lys Glu Arg Pro Ala Arg Ser Val Met Glu Ser Arg		
770	775	780
Thr Lys Leu His Asn Glu Ser Lys Lys Thr Ala Pro Arg Gln Glu Ala		
785	790	795
Ile Pro Asp Leu Glu Asp Ser Pro Pro Val Ser Asp Ser Glu Glu Gln		800
	805	810
Gln Glu Ser Ala Arg Ala Val Pro Glu Lys Ser Thr Ala Pro Leu Leu		815
	820	825
Asp Val Phe Ser Ser Met Leu Lys Asp Thr Thr Ser Gln His Arg Ala		830
	835	840
His Leu Phe Asp Leu Asn Cys Lys Ile Cys Thr Gly Gln Val Pro Ser		845
	850	855
Ala Glu Asp Glu Pro Ala Pro Lys Lys Gln Lys Leu Ser Ala Ser Val		860
865	870	875
Lys Lys Glu Asp Leu Lys Ser Lys His Asp Ser Ser Ala Pro Asp Pro		880
	885	890
Ala Pro Asp Ser Ala Asp Glu Val Met Pro Glu Ala Val Pro Glu Val		895
	900	905
Ala Ser Glu Pro Gly Leu Glu Ser Ala Ser His Pro Asn Val Asp Arg		910
	915	920
Thr Tyr Phe Pro Gly Pro Pro Gly Asp Gly His Pro Glu Pro Ser Pro		925
	930	935
Leu Glu Asp Leu Ser Pro Cys Pro Ala Ser Cys Gly Ser Gly Val Val		940
945	950	955
Thr Thr Val Thr Val Ser Gly Arg Asp Pro Arg Thr Ala Pro Ser Ser		960
	965	970
Ser Cys Thr Ala Val Ala Ser Ala Ala Ser Arg Pro Asp Ser Thr His		975
	980	985
Met Val Glu Ala Arg Gln Asp Val Pro Lys Pro Val Leu Thr Ser Val		990
	995	1000
Met Val Pro Lys Ser Ile Leu Ala Lys Pro Ser Ser Ser Pro Asp Pro		1005
	1010	1015
Arg Tyr Leu Ser Val Pro Pro Ser Pro Asn Ile Ser Thr Ser Glu Ser		1020
1025	1030	1035
Arg Ser Pro Pro Glu Gly Asp Thr Thr Leu Phe Leu Ser Arg Leu Ser		1040
	1045	1050
Thr Ile Trp Lys Gly Phe Ile Asn Met Gln Ser Val Ala Lys Phe Val		1055
	1060	1065
Thr Lys Ala Tyr Pro Val Ser Gly Cys Phe Asp Tyr Leu Ser Glu Asp		1070
	1075	1080
Leu Pro Asp Thr Ile His Ile Gly Gly Arg Ile Ala Pro Lys Thr Val		1085
	1090	1095
Trp Asp Tyr Val Gly Lys Leu Lys Ser Ser Val Ser Lys Glu Leu Cys		1100
1105	1110	1115
Leu Ile Arg Phe His Pro Ala Thr Glu Glu Glu Val Ala Tyr Ile		1120
	1125	1130
Ser Leu Tyr Ser Tyr Phe Ser Ser Arg Gly Arg Phe Gly Val Val Ala		1135
	1140	1145
Asn Asn Asn Arg His Val Lys Asp Leu Tyr Leu Ile Pro Leu Ser Ala		1150
	1155	1160
Gln Asp Pro Val Pro Ser Lys Leu Leu Pro Phe Glu Gly Pro Gly Lys		1165
	1170	1175
Arg Arg Leu Ser Gly Trp Arg		1180
1185	1190	1191

<210> 3866

<211> 1061

<212> PRT

<213> Homo sapiens

<400> 3866

Ala	Gln	Gln	Pro	Val	Gly	Arg	Arg	Gly	Gly	Ala	Ser	Gly	Ala	Gly	Gly
1				5					10					15	
Gly	Arg	Arg	Gly	Thr	Pro	Arg	Pro	Arg	Ala	Gly	Ala	Gly	Pro	Gly	Phe
			20					25					30		
Gln	Val	Ser	Ser	Gly	Gly	Cys	Arg	Leu	Ser	Lys	Met	Arg	Arg	Phe	Leu
		35				40						45			
Arg	Pro	Gly	His	Asp	Pro	Val	Arg	Glu	Arg	Leu	Lys	Arg	Asp	Leu	Phe
	50					55					60				
Gln	Phe	Asn	Lys	Thr	Val	Glu	His	Gly	Phe	Pro	His	Gln	Pro	Ser	Ala
	65				70					75					80
Leu	Gly	Tyr	Ser	Pro	Ser	Leu	Arg	Ile	Leu	Ala	Ile	Gly	Thr	Arg	Ser
				85					90					95	
Gly	Ala	Ile	Lys	Leu	Tyr	Gly	Ala	Pro	Gly	Val	Glu	Phe	Met	Gly	Leu
			100					105					110		
His	Gln	Glu	Asn	Asn	Ala	Val	Thr	Gln	Ile	His	Leu	Leu	Pro	Gly	Gln
		115					120						125		
Cys	Gln	Leu	Val	Thr	Leu	Leu	Asp	Asp	Asn	Ser	Leu	His	Leu	Trp	Ser
	130					135					140				
Leu	Lys	Val	Lys	Gly	Gly	Ala	Ser	Glu	Leu	Gln	Glu	Asp	Glu	Ser	Phe
	145				150					155					160
Thr	Leu	Arg	Gly	Pro	Pro	Gly	Ala	Ala	Pro	Ser	Ala	Thr	Gln	Ile	Thr
				165					170					175	
Val	Val	Leu	Pro	His	Ser	Ser	Cys	Glu	Leu	Leu	Tyr	Leu	Gly	Thr	Glu
			180					185					190		
Ser	Gly	Asn	Val	Phe	Val	Val	Gln	Leu	Pro	Ala	Phe	Arg	Ala	Leu	Glu
		195					200					205			
Asp	Arg	Thr	Ile	Ser	Ser	Asp	Ala	Val	Leu	Gln	Arg	Leu	Pro	Glu	Glu
	210					215					220				
Ala	Arg	His	Arg	Arg	Val	Phe	Glu	Met	Val	Glu	Ala	Leu	Gln	Glu	His
	225				230					235					240
Pro	Arg	Asp	Pro	Asn	Gln	Ile	Leu	Ile	Gly	Tyr	Ser	Arg	Gly	Leu	Val
				245					250					255	
Val	Ile	Trp	Asp	Leu	Gln	Gly	Ser	Arg	Val	Leu	Tyr	His	Phe	Leu	Ser
		260					265						270		
Ser	Gln	Gln	Leu	Glu	Asn	Ile	Trp	Trp	Gln	Arg	Asp	Gly	Arg	Leu	Leu
		275				280						285			
Val	Ser	Cys	His	Ser	Asp	Gly	Ser	Tyr	Cys	Gln	Trp	Pro	Val	Ser	Ser
	290					295					300				
Glu	Ala	Gln	Gln	Pro	Glu	Pro	Leu	Arg	Ser	Leu	Val	Pro	Tyr	Gly	Pro
	305					310				315					320
Phe	Pro	Cys	Lys	Ala	Ile	Thr	Arg	Ile	Leu	Trp	Leu	Thr	Thr	Arg	Gln
				325					330					335	
Gly	Leu	Pro	Phe	Thr	Ile	Phe	Gln	Gly	Gly	Met	Pro	Arg	Ala	Ser	Tyr
			340					345					350		
Gly	Asp	Arg	His	Cys	Ile	Ser	Val	Ile	His	Asp	Gly	Gln	Gln	Thr	Ala
		355					360					365			
Phe	Asp	Phe	Thr	Ser	Arg	Val	Ile	Gly	Phe	Thr	Val	Leu	Thr	Glu	Ala
	370					375					380				
Asp	Pro	Ala	Ala	Thr	Phe	Asp	Asp	Pro	Tyr	Ala	Leu	Val	Val	Leu	Ala
	385				390					395					400
Glu	Glu	Glu	Leu	Val	Val	Ile	Asp	Leu	Gln	Thr	Ala	Gly	Trp	Pro	Pro
				405					410					415	
Val	Gln	Leu	Pro	Tyr	Leu	Ala	Ser	Leu	His	Cys	Ser	Ala	Ile	Thr	Cys
			420					425					430		
Ser	His	His	Val	Ser	Asn	Ile	Pro	Leu	Lys	Leu	Trp	Glu	Arg	Ile	Ile
		435					440					445			
Ala	Ala	Gly	Ser	Arg	Gln	Asn	Ala	His	Phe	Ser	Thr	Met	Glu	Trp	Pro
	450					455					460				
Ile	Asp	Gly	Gly	Thr	Ser	Leu	Thr	Pro	Ala	Pro	Pro	Gln	Arg	Asp	Leu
	465				470					475					480
Leu	Leu	Thr	Gly	His	Glu	Asp	Gly	Thr	Val	Arg	Phe	Trp	Asp	Ala	Ser
				485					490					495	
Gly	Val	Cys	Leu	Arg	Leu	Leu	Tyr	Lys	Leu	Ser	Thr	Val	Arg	Val	Phe

500	505	510
Leu Thr Asp Thr Asp Pro Asn Glu Asn Leu Ser Ala Gln Gly Glu Asp		
515	520	525
Glu Trp Pro Pro Leu Arg Lys Val Gly Ser Phe Asp Pro Tyr Ser Asp		
530	535	540
Asp Pro Arg Leu Gly Ile Gln Lys Ile Phe Leu Cys Lys Tyr Ser Gly		
545	550	555
Tyr Leu Ala Val Ala Gly Thr Ala Gly Gln Val Leu Val Leu Glu Leu		
565	570	575
Asn Asp Glu Ala Ala Glu Gln Ala Val Glu Gln Val Glu Ala Asp Leu		
580	585	590
Leu Gln Asp Gln Glu Gly Tyr Arg Trp Lys Gly His Glu Arg Leu Ala		
595	600	605
Ala Arg Ser Gly Pro Val Arg Phe Glu Pro Gly Phe Gln Pro Phe Val		
610	615	620
Leu Val Gln Cys Gln Pro Ala Val Val Thr Ser Leu Ala Leu His		
625	630	635
Ser Glu Trp Arg Leu Val Ala Phe Gly Thr Ser His Gly Phe Gly Leu		
645	650	655
Phe Asp His Gln Gln Arg Arg Gln Val Phe Val Lys Cys Thr Leu His		
660	665	670
Pro Ser Asp Gln Leu Ala Leu Glu Gly Pro Leu Ser Arg Val Lys Ser		
675	680	685
Leu Lys Lys Ser Leu Arg Gln Ser Phe Arg Arg Met Arg Arg Ser Arg		
690	695	700
Val Ser Ser Arg Lys Arg His Pro Ala Gly Pro Pro Gly Glu Ala Gln		
705	710	715
Glu Gly Ser Ala Lys Ala Glu Arg Pro Gly Leu Gln Asn Met Glu Leu		
725	730	735
Ala Pro Val Gln Arg Lys Ile Glu Ala Arg Ser Ala Glu Asp Ser Phe		
740	745	750
Thr Gly Phe Val Arg Thr Leu Tyr Phe Ala Asp Thr Tyr Leu Lys Asp		
755	760	765
Ser Ser Arg His Cys Pro Ser Leu Trp Ala Gly Thr Asn Gly Gly Thr		
770	775	780
Ile Tyr Ala Phe Ser Leu Arg Val Pro Pro Ala Glu Arg Arg Met Asp		
785	790	795
Glu Pro Val Arg Ala Glu Gln Ala Lys Glu Ile Gln Leu Met His Arg		
805	810	815
Ala Pro Val Val Gly Ile Leu Val Leu Asp Gly His Ser Val Pro Leu		
820	825	830
Pro Glu Pro Leu Glu Val Ala His Asp Leu Ser Lys Ser Pro Asp Met		
835	840	845
Gln Gly Ser His Gln Leu Leu Val Val Ser Glu Glu Gln Phe Lys Val		
850	855	860
Phe Thr Leu Pro Lys Val Ser Ala Lys Leu Lys Leu Lys Leu Thr Ala		
865	870	875
Leu Glu Gly Ser Arg Val Arg Arg Val Ser Val Ala His Phe Gly Ser		
885	890	895
Arg Arg Ala Glu Asp Tyr Gly Glu His His Leu Ala Val Leu Thr Asn		
900	905	910
Leu Gly Asp Ile Gln Val Val Ser Leu Pro Leu Leu Lys Pro Gln Val		
915	920	925
Arg Tyr Ser Cys Ile Arg Arg Glu Asp Val Ser Gly Ile Ala Ser Cys		
930	935	940
Val Phe Thr Lys Tyr Gly Gln Gly Phe Tyr Leu Ile Ser Pro Ser Glu		
945	950	955
Phe Glu Arg Phe Ser Leu Ser Thr Lys Gly Leu Val Glu Pro Arg Cys		
965	970	975
Leu Val Asp Ser Ala Glu Thr Lys Asn His Arg Pro Gly Asn Gly Ala		
980	985	990
Gly Pro Lys Lys Ala Pro Ser Arg Ala Arg Asn Ser Gly Thr Gln Ser		
995	1000	1005
Asp Gly Glu Glu Lys Gln Pro Gly Leu Val Met Glu Arg Ala Leu Leu		

1010 1015 1020
 Ser Asp Glu Arg Ala Ala Thr Gly Val His Ile Glu Pro Pro Trp Gly
 1025 1030 1035 1040
 Ala Ala Ser Ala Met Ala Glu Gln Ser Glu Trp Leu Ser Val Gln Ala
 1045 1050 1055
 Ala Arg
 1058

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 <211> 1061
 <212> PRT
 <213> Homo sapiens

<400> 3867
 Ala Gln Gln Pro Val Gly Arg Arg Gly Gly Ala Ser Gly Ala Gly Gly
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 Gly Arg Arg Gly Thr Pro Arg Pro Arg Ala Gly Ala Gly Pro Gly Phe
 20 25 30
 Gln Val Ser Ser Gly Gly Cys Arg Leu Ser Lys Met Arg Arg Phe Leu
 35 40 45
 Arg Pro Gly His Asp Pro Val Arg Glu Arg Leu Lys Arg Asp Leu Phe
 50 55 60
 Gln Phe Asn Lys Thr Val Glu His Gly Phe Pro His Gln Pro Ser Ala
 65 70 75 80
 Leu Gly Tyr Ser Pro Ser Leu Arg Ile Leu Ala Ile Gly Thr Arg Ser
 85 90 95
 Gly Ala Ile Lys Leu Tyr Gly Ala Pro Gly Val Glu Phe Met Gly Leu
 100 105 110
 His Gln Glu Asn Asn Ala Val Thr Gln Ile His Leu Leu Pro Gly Gln
 115 120 125
 Cys Gln Leu Val Thr Leu Leu Asp Asp Asn Ser Leu His Leu Trp Ser
 130 135 140
 Leu Lys Val Lys Gly Gly Ala Ser Glu Leu Gln Glu Asp Glu Ser Phe
 145 150 155 160
 Thr Leu Arg Gly Pro Pro Gly Ala Ala Pro Ser Ala Thr Gln Ile Thr
 165 170 175
 Val Val Leu Pro His Ser Ser Cys Glu Leu Leu Tyr Leu Gly Thr Glu
 180 185 190
 Ser Gly Asn Val Phe Val Val Gln Leu Pro Ala Phe Arg Ala Leu Glu
 195 200 205
 Asp Arg Thr Ile Ser Ser Asp Ala Val Leu Gln Arg Leu Pro Glu Glu
 210 215 220
 Ala Arg His Arg Arg Val Phe Glu Met Val Glu Ala Leu Gln Glu His
 225 230 235 240
 Pro Arg Asp Pro Asn Gln Ile Leu Ile Gly Tyr Ser Arg Gly Leu Val
 245 250 255
 Val Ile Trp Asp Leu Gln Gly Ser Arg Val Leu Tyr His Phe Leu Ser
 260 265 270
 Ser Gln Gln Leu Glu Asn Ile Trp Trp Gln Arg Asp Gly Arg Leu Leu
 275 280 285
 Val Ser Cys His Ser Asp Gly Ser Tyr Cys Gln Trp Pro Val Ser Ser
 290 295 300
 Glu Ala Gln Gln Pro Glu Pro Leu Arg Ser Leu Val Pro Tyr Gly Pro
 305 310 315 320
 Phe Pro Cys Lys Ala Ile Thr Arg Ile Leu Trp Leu Thr Thr Arg Gln
 325 330 335
 Gly Leu Pro Phe Thr Ile Phe Gln Gly Gly Met Pro Arg Ala Ser Tyr
 340 345 350
 Gly Asp Arg His Cys Ile Ser Val Ile His Asp Gly Gln Gln Thr Ala
 355 360 365
 Phe Asp Phe Thr Ser Arg Val Ile Gly Phe Thr Val Leu Thr Glu Ala

370	375	380
Asp Pro Ala Ala Thr	Phe Asp Asp Pro Tyr Ala	Leu Val Val Leu Ala
385	390	395
Glu Glu Glu Leu Val	Ile Asp Leu Gln Thr	Ala Gly Trp Pro Pro
405	410	415
Val Gln Leu Pro Tyr	Leu Ala Ser Leu His Cys	Ser Ala Ile Thr Cys
420	425	430
Ser His His Val Ser	Asn Ile Pro Leu Lys Leu Trp	Glu Arg Ile Ile
435	440	445
Ala Ala Gly Ser Arg	Gln Asn Ala His Phe Ser Thr	Met Glu Trp Pro
450	455	460
Ile Asp Gly Gly Thr	Ser Leu Thr Pro Ala Pro	Gln Arg Asp Leu
465	470	475
Leu Leu Thr Gly His	Glu Asp Gly Thr Val Arg	Phe Trp Asp Ala Ser
485	490	495
Gly Val Cys Leu Arg	Leu Leu Tyr Lys Leu Ser Thr	Val Arg Val Phe
500	505	510
Leu Thr Asp Thr Asp	Pro Asn Glu Asn Leu Ser Ala	Gln Gly Glu Asp
515	520	525
Glu Trp Pro Pro Leu	Arg Lys Val Gly Ser Phe Asp	Pro Tyr Ser Asp
530	535	540
Asp Pro Arg Leu Gly	Ile Gln Lys Ile Phe Leu Cys	Lys Tyr Ser Gly
545	550	555
Tyr Leu Ala Val Ala	Gly Thr Ala Gly Gln Val Leu	Val Leu Glu Leu
565	570	575
Asn Asp Glu Ala Ala	Glu Gln Ala Val Glu Gln Val	Glu Ala Asp Leu
580	585	590
Leu Gln Asp Gln Glu	Gly Tyr Arg Trp Lys Gly His	Glu Arg Leu Ala
595	600	605
Ala Arg Ser Gly Pro	Val Arg Phe Glu Pro Gly Phe	Gln Pro Phe Val
610	615	620
Leu Val Gln Cys Gln	Pro Pro Ala Val Val Thr	Ser Leu Ala Leu His
625	630	635
Ser Glu Trp Arg Leu	Val Ala Phe Gly Thr Ser His	Gly Phe Gly Leu
645	650	655
Phe Asp His Gln Gln	Arg Arg Gln Val Phe Val Lys	Cys Thr Leu His
660	665	670
Pro Ser Asp Gln Leu	Ala Leu Glu Gly Pro Leu Ser	Arg Val Lys Ser
675	680	685
Leu Lys Lys Ser Leu	Arg Gln Ser Phe Arg Arg Met	Arg Arg Ser Arg
690	695	700
Val Ser Ser Arg Lys	Arg His Pro Ala Gly Pro	Pro Gly Glu Ala Gln
705	710	715
Glu Gly Ser Ala Lys	Ala Glu Arg Pro Gly Leu Gln	Asn Met Glu Leu
725	730	735
Ala Pro Val Gln Arg	Lys Ile Glu Ala Arg Ser Ala	Glu Asp Ser Phe
740	745	750
Thr Gly Phe Val Arg	Thr Leu Tyr Phe Ala Asp Thr	Tyr Leu Lys Asp
755	760	765
Ser Ser Arg His Cys	Pro Ser Leu Trp Ala Gly Thr	Asn Gly Gly Thr
770	775	780
Ile Tyr Ala Phe Ser	Leu Arg Val Pro Pro Ala Glu	Arg Arg Met Asp
785	790	795
Glu Pro Val Arg Ala	Glu Gln Ala Lys Glu Ile Gln	Leu Met His Arg
805	810	815
Ala Pro Val Val Gly	Ile Leu Val Leu Asp Gly His	Ser Val Pro Leu
820	825	830
Pro Glu Pro Leu Glu	Val Ala His Asp Leu Ser Lys	Ser Pro Asp Met
835	840	845
Gln Gly Ser His Gln	Leu Leu Val Val Ser Glu Glu	Gln Phe Lys Val
850	855	860
Phe Thr Leu Pro Lys	Val Ser Ala Lys Leu Lys Leu	Lys Leu Thr Ala
865	870	875
Leu Glu Gly Ser Arg	Val Arg Arg Val Ser Val Ala	His Phe Gly Ser

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      885      890      895
Arg Arg Ala Glu Asp Tyr Gly Glu His His Leu Ala Val Leu Thr Asn
      900      905      910
Leu Gly Asp Ile Gln Val Val Ser Leu Pro Leu Leu Lys Pro Gln Val
      915      920      925
Arg Tyr Ser Cys Ile Arg Arg Glu Asp Val Ser Gly Ile Ala Ser Cys
      930      935      940
Val Phe Thr Lys Tyr Gly Gln Gly Phe Tyr Leu Ile Ser Pro Ser Glu
      945      950      955      960
Phe Glu Arg Phe Ser Leu Ser Thr Lys Gly Leu Val Glu Pro Arg Cys
      965      970      975
Leu Val Asp Ser Ala Glu Thr Lys Asn His Arg Pro Gly Asn Gly Ala
      980      985      990
Gly Pro Lys Lys Ala Pro Ser Arg Ala Arg Asn Ser Gly Thr Gln Ser
      995      1000      1005
Asp Gly Glu Glu Lys Gln Pro Gly Leu Val Met Glu Arg Ala Leu Leu
      1010      1015      1020
Ser Asp Glu Arg Ala Ala Thr Gly Val His Ile Glu Pro Pro Trp Gly
      1025      1030      1035      1040
Ala Ala Ser Ala Met Ala Glu Gln Ser Glu Trp Leu Ser Val Gln Ala
      1045      1050      1055
Ala Arg
      1058

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<210> 3868
<211> 834
<212> PRT
<213> Homo sapiens

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      <400> 3868
Gly Asp Ser Gly Gly Pro Leu Val Cys Glu Glu Pro Ser Gly Arg Phe
      1      5      10      15
Phe Leu Ala Gly Ile Val Ser Trp Gly Ile Gly Cys Ala Glu Ala Arg
      20      25      30
Arg Pro Gly Val Tyr Ala Arg Val Thr Arg Leu Arg Asp Trp Ile Leu
      35      40      45
Glu Ala Thr Thr Lys Ala Ser Met Pro Leu Ala Pro Thr Met Ala Pro
      50      55      60
Ala Pro Ala Ala Pro Ser Thr Ala Trp Pro Thr Ser Pro Glu Ser Pro
      65      70      75      80
Val Val Ser Thr Pro Thr Lys Ser Met Gln Ala Leu Ser Thr Val Pro
      85      90      95
Leu Asp Trp Val Thr Val Pro Lys Leu Gln Glu Cys Gly Ala Arg Pro
      100      105      110
Ala Met Glu Lys Pro Thr Arg Val Val Gly Gly Phe Gly Ala Ala Ser
      115      120      125
Gly Glu Val Pro Trp Gln Val Ser Leu Lys Glu Gly Ser Arg His Phe
      130      135      140
Cys Gly Ala Thr Val Val Gly Asp Arg Trp Leu Leu Ser Ala Ala His
      145      150      155      160
Cys Phe Asn His Thr Lys Val Glu Gln Val Arg Ala His Leu Gly Thr
      165      170      175
Ala Ser Leu Leu Gly Leu Gly Gly Ser Pro Val Lys Ile Gly Leu Arg
      180      185      190
Arg Val Val Leu His Pro Leu Tyr Asn Pro Gly Ile Leu Asp Phe Asp
      195      200      205
Leu Ala Val Leu Glu Leu Ala Ser Pro Leu Ala Phe Asn Lys Tyr Ile
      210      215      220
Gln Pro Val Cys Leu Pro Leu Ala Ile Gln Lys Phe Pro Val Gly Arg
      225      230      235      240
Lys Cys Met Ile Ser Gly Trp Gly Asn Thr Gln Glu Gly Asn Ala Thr

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5638

755	760	765
Glu Ser Phe Arg Thr Val	Leu Val Asn Ala Asp Gly	Glu Glu Val Ala
770	775	780
Met Arg Thr Val Lys Lys	Ser Ser Val Met Arg	Glu Asn Glu Asn Gly
785	790	795
Glu Glu Glu Glu Glu	Ala Glu Phe Gly Glu Glu	Asp Leu Phe His
805	810	815
Gln Gln Gly Asp Pro Arg	Thr Thr Ser Arg Gly Cys	Tyr Val Met
820	825	830 831

<210> 3869
 <211> 652
 <212> PRT
 <213> Homo sapiens

<400> 3869

Arg Tyr Arg Ala Gly Ile Pro Gly Asp Gly Arg Lys Asp Tyr Ile Arg	1	5	10	15
Leu Thr Arg Pro Gly Leu Thr Leu Pro Gly Arg Ala Met Phe Ala Arg	20	25	30	
Gly Ser Arg Arg Arg Arg Ser Gly Arg Ala Pro Pro Glu Ala Glu Asp	35	40	45	
Pro Asp Arg Gly Gln Pro Cys Asn Ser Cys Arg Glu Gln Cys Pro Gly	50	55	60	
Phe Leu Leu His Gly Trp Arg Lys Ile Cys Gln His Cys Lys Cys Pro	65	70	75	80
Arg Glu Glu His Ala Val His Ala Val Pro Val Asp Leu Glu Arg Ile	85	90	95	
Met Cys Arg Leu Ile Ser Asp Phe Gln Arg His Ser Ile Ser Asp Asp	100	105	110	
Asp Ser Gly Cys Ala Ser Glu Glu Tyr Ala Trp Val Pro Pro Gly Leu	115	120	125	
Lys Pro Glu Gln Val Tyr Gln Phe Phe Ser Cys Leu Pro Glu Asp Lys	130	135	140	
Val Pro Tyr Val Asn Ser Pro Gly Glu Lys Tyr Arg Ile Lys Gln Leu	145	150	155	160
Leu His Gln Leu Pro Pro His Asp Ser Glu Ala Gln Tyr Cys Thr Ala	165	170	175	
Leu Glu Glu Glu Glu Lys Lys Glu Leu Arg Ala Phe Ser Gln Gln Arg	180	185	190	
Lys Arg Glu Asn Leu Gly Arg Leu Gly Ile Val Arg Ile Phe Pro Val	195	200	205	
Thr Ile Thr Gly Ala Ile Cys Glu Glu Cys Gly Lys Gln Ile Gly Gly	210	215	220	
Gly Asp Ile Ala Val Phe Ala Ser Arg Ala Ser Leu Gly Leu Leu Leu	225	230	235	240
Gly Gln Pro Ser Cys Phe Val Cys Thr Thr Cys Gln Glu Leu Leu Val	245	250	255	
Asp Leu Ile Tyr Phe Tyr His Val Gly Lys Val Tyr Cys Gly Arg His	260	265	270	
His Ala Glu Cys Leu Arg Pro Arg Cys Gln Ala Cys Asp Glu Ile Ile	275	280	285	
Phe Ser Pro Glu Cys Thr Glu Ala Glu Gly Arg His Trp His Met Asp	290	295	300	
His Phe Cys Cys Phe Glu Cys Glu Ala Ser Leu Gly Gly Gln Arg Tyr	305	310	315	320
Val Met Arg Gln Ser Arg Pro His Cys Cys Ala Cys Tyr Glu Ala Arg	325	330	335	
His Ala Glu Tyr Cys Asp Gly Cys Gly Glu His Ile Gly Leu Asp Gln	340	345	350	
Gly Gln Met Ala Tyr Glu Gly Gln His Trp His Ala Ser Asp Arg Cys				

355 360 365
 Phe Cys Cys Ser Arg Cys Gly Arg Ala Leu Leu Gly Arg Pro Phe Leu
 370 375 380
 Pro Arg Arg Gly Leu Ile Phe Cys Ser Arg Ala Cys Ser Leu Gly Ser
 385 390 395 400
 Glu Pro Thr Ala Pro Gly Pro Ser Arg Arg Ser Trp Ser Ala Gly Pro
 405 410 415
 Val Thr Ala Pro Leu Ala Ala Ser Thr Ala Ser Phe Ser Ala Val Lys
 420 425 430
 Gly Ala Ser Glu Thr Thr Thr Lys Gly Thr Ser Thr Glu Leu Ala Pro
 435 440 445
 Ala Thr Gly Pro Glu Glu Pro Ser Arg Phe Leu Arg Gly Ala Pro His
 450 455 460
 Arg His Ser Met Pro Glu Leu Gly Leu Arg Ser Val Pro Glu Pro Pro
 465 470 475 480
 Pro Glu Ser Pro Gly Gln Pro Asn Leu Arg Pro Asp Asp Ser Ala Phe
 485 490 495
 Gly Arg Gln Ser Thr Pro Arg Val Ser Phe Arg Asp Pro Leu Val Ser
 500 505 510
 Glu Gly Gly Pro Arg Arg Thr Leu Ser Ala Pro Pro Ala Gln Arg Arg
 515 520 525
 Arg Pro Arg Ser Pro Pro Pro Arg Ala Pro Ser Arg Arg Arg His His
 530 535 540
 His His Asn His His His His His Asn Arg His Pro Ser Arg Arg Arg
 545 550 555 560
 His Tyr Gln Cys Asp Ala Gly Ser Gly Ser Asp Ser Glu Ser Cys Ser
 565 570 575
 Ser Ser Pro Ser Ser Ser Ser Ser Glu Ser Ser Glu Asp Asp Gly Phe
 580 585 590
 Phe Leu Gly Glu Arg Ile Pro Leu Pro Pro His Leu Cys Arg Pro Met
 595 600 605
 Pro Ala Gln Asp Thr Ala Met Glu Thr Phe Asn Ser Pro Ser Leu Ser
 610 615 620
 Leu Pro Arg Asp Ser Arg Ala Gly Met Pro Arg Gln Ala Arg Asp Lys
 625 630 635 640
 Asn Cys Ile Val Ala
 645

<210> 3870

<211> 1161

<212> PRT

<213> Homo sapiens

<400> 3870

Phe Val Trp Arg Val Phe Tyr Val His Ala Ser Cys Met Pro Pro Arg
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 Ala Arg Ser Trp Glu Gly Ala His Ala Pro Val Gly Met His Val Ala
 20 25 30
 Glu Ala His Ala Cys Ser Ser Gln Gln Gln Gln Met Pro Pro Ala Gln
 35 40 45
 Phe Trp Met Leu Glu Trp Leu Leu His Leu Cys Ala Phe Leu Ser Thr
 50 55 60
 Pro Ser Phe Pro His Trp Cys Cys Cys Ser Asn Pro His Gly Ser Ile
 65 70 75 80
 Ala Asp Lys Pro Glu Glu Ile Val Pro Ala Ser Lys Pro Ser Arg Ala
 85 90 95
 Ala Glu Asn Met Ala Val Glu Pro Arg Val Ala Thr Ile Lys Gln Arg
 100 105 110
 Pro Ser Ser Arg Cys Phe Pro Ala Gly Ser Asp Met Asn Ser Val Tyr
 115 120 125
 Glu Arg Gln Gly Ile Ala Val Met Thr Pro Thr Val Pro Gly Ser Pro

130						135						140					
Lys	Ala	Pro	Phe	Leu	Gly	Ile	Pro	Arg	Gly	Thr	Met	Arg	Arg	Gln	Lys		
145					150					155				160			
Ser	Ile	Asp	Ser	Arg	Ile	Phe	Leu	Ser	Gly	Ile	Thr	Glu	Glu	Glu	Arg		
				165					170					175			
Gln	Phe	Leu	Ala	Pro	Pro	Met	Leu	Lys	Phe	Thr	Arg	Ser	Leu	Ser	Met		
			180					185					190				
Pro	Asp	Thr	Ser	Glu	Asp	Ile	Pro	Pro	Pro	Pro	Gln	Ser	Val	Pro	Pro		
	195						200					205					
Ser	Pro	Pro	Pro	Pro	Ser	Pro	Thr	Thr	Tyr	Asn	Cys	Pro	Lys	Ser	Pro		
	210					215					220						
Thr	Pro	Arg	Val	Tyr	Gly	Thr	Ile	Lys	Pro	Ala	Phe	Asn	Gln	Asn	Ser		
225					230					235					240		
Ala	Ala	Lys	Val	Ser	Pro	Ala	Thr	Arg	Ser	Asp	Thr	Val	Ala	Thr	Met		
				245					250					255			
Met	Arg	Glu	Lys	Gly	Met	Tyr	Phe	Arg	Arg	Glu	Leu	Asp	Arg	Tyr	Ser		
			260				265					270					
Leu	Asp	Ser	Glu	Asp	Leu	Tyr	Ser	Arg	Asn	Ala	Gly	Pro	Gln	Ala	Asn		
	275						280					285					
Phe	Arg	Asn	Lys	Arg	Gly	Gln	Met	Pro	Glu	Asn	Pro	Tyr	Ser	Glu	Val		
	290					295				300							
Gly	Lys	Ile	Ala	Ser	Lys	Ala	Val	Tyr	Val	Pro	Ala	Lys	Pro	Ala	Arg		
305					310					315					320		
Arg	Lys	Gly	Met	Leu	Val	Lys	Gln	Ser	Asn	Val	Glu	Asp	Ser	Pro	Glu		
				325					330					335			
Lys	Thr	Cys	Ser	Ile	Pro	Ile	Pro	Thr	Ile	Ile	Val	Lys	Glu	Pro	Ser		
			340					345					350				
Thr	Ser	Ser	Ser	Gly	Lys	Ser	Ser	Gln	Gly	Ser	Ser	Met	Glu	Ile	Asp		
	355						360					365					
Pro	Gln	Ala	Pro	Glu	Pro	Pro	Ser	Gln	Leu	Arg	Pro	Asp	Glu	Ser	Leu		
	370					375					380						
Thr	Val	Ser	Ser	Pro	Phe	Ala	Ala	Ala	Ile	Ala	Gly	Ala	Val	Arg	Asp		
385					390					395					400		
Arg	Glu	Lys	Arg	Leu	Glu	Ala	Arg	Arg	Asn	Ser	Pro	Ala	Phe	Leu	Ser		
				405					410					415			
Ala	Asp	Leu	Gly	Asp	Glu	His	Val	Gly	Leu	Gly	Pro	Pro	Ala	Pro	Arg		
			420					425					430				
Thr	Arg	Pro	Ser	Met	Phe	Pro	Glu	Glu	Gly	Asp	Phe	Ala	Asp	Glu	Asp		
	435						440					445					
Ser	Ala	Glu	Gln	Leu	Ser	Ser	Pro	Met	Pro	Ser	Ala	Thr	Pro	Arg	Glu		
	450					455					460						
Pro	Glu	Asn	His	Phe	Val	Gly	Gly	Ala	Glu	Ala	Ser	Ala	Pro	Gly	Glu		
465					470					475					480		
Ala	Gly	Arg	Pro	Leu	Asn	Ser	Thr	Ser	Lys	Ala	Gln	Gly	Pro	Glu	Ser		
				485					490					495			
Ser	Pro	Ala	Val	Pro	Ser	Ala	Ser	Ser	Gly	Thr	Ala	Gly	Pro	Gly	Asn		
			500				505					510					
Tyr	Val	His	Pro	Leu	Thr	Gly	Arg	Leu	Leu	Asp	Pro	Ser	Ser	Pro	Leu		
	515						520					525					
Ala	Leu	Ala	Leu	Ser	Ala	Arg	Asp	Arg	Ala	Met	Lys	Glu	Ser	Gln	Gln		
	530					535					540						
Gly	Pro	Lys	Gly	Glu	Ala	Pro	Lys	Ala	Asp	Leu	Asn	Lys	Pro	Leu	Tyr		
545					550					555					560		
Ile	Asp	Thr	Lys	Met	Arg	Pro	Ser	Leu	Asp	Ala	Gly	Phe	Pro	Thr	Val		
				565					570					575			
Thr	Arg	Gln	Asn	Thr	Arg	Gly	Pro	Leu	Arg	Arg	Gln	Glu	Thr	Glu	Asn		
			580					585					590				
Lys	Tyr	Glu	Thr	Asp	Leu	Gly	Arg	Asp	Arg	Lys	Gly	Asp	Asp	Lys	Lys		
	595						600					605					
Asn	Met	Leu	Ile	Asp	Ile	Met	Asp	Thr	Ser	Gln	Gln	Lys	Ser	Ala	Gly		
	610					615					620						
Leu	Leu	Met	Val	His	Thr	Val	Asp	Ala	Thr	Lys	Leu	Asp	Asn	Ala	Leu		
625						630					635				640		
Gln	Glu	Glu	Asp	Glu	Lys	Ala	Glu	Val	Glu	Met	Lys	Pro	Asp	Ser	Ser		

5642

1155

11601161

<210> 3871

<211> 378

<212> PRT

<213> Homo sapiens

<400> 3871

Val	Glu	Ser	Arg	Ser	Ala	Trp	His	Glu	Gly	Glu	Asp	Gln	Ile	Asp	Arg
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Leu	Asp	Phe	Ile	Arg	Asn	Gln	Met	Asn	Leu	Leu	Thr	Leu	Asp	Val	Lys
			20					25					30		
Lys	Lys	Ile	Lys	Glu	Val	Thr	Glu	Glu	Val	Ala	Asn	Lys	Val	Ser	Cys
		35					40					45			
Ala	Met	Thr	Asp	Glu	Ile	Cys	Arg	Leu	Ser	Val	Leu	Val	Asp	Glu	Phe
	50					55					60				
Cys	Ser	Glu	Phe	His	Pro	Asn	Pro	Asp	Val	Leu	Lys	Ile	Tyr	Lys	Ser
	65				70					75				80	
Glu	Leu	Asn	Lys	His	Ile	Glu	Asp	Gly	Met	Gly	Arg	Asn	Leu	Ala	Asp
				85					90					95	
Arg	Cys	Thr	Asp	Glu	Val	Asn	Ala	Leu	Val	Leu	Gln	Thr	Gln	Gln	Glu
			100					105					110		
Ile	Ile	Glu	Asn	Leu	Lys	Pro	Leu	Leu	Pro	Ala	Gly	Ile	Gln	Asp	Lys
	115					120						125			
Leu	His	Thr	Leu	Ile	Pro	Cys	Lys	Lys	Phe	Asp	Leu	Ser	Tyr	Asn	Leu
	130					135					140				
Asn	Tyr	His	Lys	Leu	Cys	Ser	Asp	Phe	Gln	Glu	Asp	Ile	Val	Phe	Arg
	145				150					155				160	
Phe	Ser	Leu	Gly	Trp	Ser	Ser	Leu	Val	His	Arg	Phe	Leu	Gly	Pro	Arg
			165					170						175	
Asn	Ala	Gln	Arg	Val	Leu	Leu	Gly	Leu	Ser	Glu	Pro	Ile	Phe	Gln	Leu
		180						185					190		
Pro	Arg	Ser	Leu	Ala	Ser	Thr	Pro	Thr	Ala	Pro	Thr	Thr	Pro	Ala	Thr
		195					200					205			
Pro	Asp	Asn	Ala	Ser	Gln	Glu	Glu	Leu	Met	Ile	Thr	Leu	Val	Thr	Gly
	210					215						220			
Leu	Ala	Ser	Val	Thr	Ser	Arg	Thr	Ser	Met	Gly	Ile	Ile	Ile	Val	Gly
	225				230					235				240	
Gly	Val	Ile	Trp	Lys	Thr	Ile	Gly	Trp	Lys	Leu	Leu	Ser	Val	Ser	Leu
			245						250					255	
Thr	Met	Tyr	Gly	Ala	Leu	Tyr	Leu	Tyr	Glu	Arg	Leu	Ser	Trp	Thr	Thr
			260					265					270		
His	Ala	Lys	Glu	Arg	Ala	Phe	Lys	Gln	Gln	Phe	Val	Asn	Tyr	Ala	Thr
		275					280					285			
Glu	Lys	Leu	Arg	Met	Ile	Val	Ser	Ser	Thr	Ser	Ala	Asn	Cys	Ser	His
	290					295					300				
Gln	Val	Lys	Gln	Gln	Ile	Ala	Thr	Thr	Phe	Ala	Arg	Leu	Cys	Gln	Gln
	305				310					315				320	
Val	Asp	Ile	Thr	Gln	Lys	Gln	Leu	Glu	Glu	Glu	Ile	Ala	Arg	Leu	Pro
				325					330					335	
Lys	Glu	Ile	Asp	Gln	Leu	Glu	Lys	Ile	Gln	Asn	Asn	Ser	Lys	Leu	Leu
			340					345					350		
Arg	Asn	Lys	Ala	Val	Gln	Leu	Glu	Asn	Glu	Leu	Glu	Asn	Phe	Thr	Lys
		355				360						365			
Gln	Phe	Leu	Pro	Ser	Ser	Asn	Glu	Glu	Ser						
	370					375			378						

<210> 3872

<211> 378

<212> PRT
<213> Homo sapiens

<400> 3872
Val Glu Ser Arg Ser Ala Trp His Glu Gly Glu Asp Gln Ile Asp Arg
1 5 10 15
Leu Asp Phe Ile Arg Asn Gln Met Asn Leu Leu Thr Leu Asp Val Lys
20 25 30
Lys Lys Ile Lys Glu Val Thr Glu Glu Val Ala Asn Lys Val Ser Cys
35 40 45
Ala Met Thr Asp Glu Ile Cys Arg Leu Ser Val Leu Val Asp Glu Phe
50 55 60
Cys Ser Glu Phe His Pro Asn Pro Asp Val Leu Lys Ile Tyr Lys Ser
65 70 75 80
Glu Leu Asn Lys His Ile Glu Asp Gly Met Gly Arg Asn Leu Ala Asp
85 90 95
Arg Cys Thr Asp Glu Val Asn Ala Leu Val Leu Gln Thr Gln Gln Glu
100 105 110
Ile Ile Glu Asn Leu Lys Pro Leu Leu Pro Ala Gly Ile Gln Asp Lys
115 120 125
Leu His Thr Leu Ile Pro Cys Lys Lys Phe Asp Leu Ser Tyr Asn Leu
130 135 140
Asn Tyr His Lys Leu Cys Ser Asp Phe Gln Glu Asp Ile Val Phe Arg
145 150 155 160
Phe Ser Leu Gly Trp Ser Ser Leu Val His Arg Phe Leu Gly Pro Arg
165 170 175
Asn Ala Gln Arg Val Leu Leu Gly Leu Ser Glu Pro Ile Phe Gln Leu
180 185 190
Pro Arg Ser Leu Ala Ser Thr Pro Thr Ala Pro Thr Thr Pro Ala Thr
195 200 205
Pro Asp Asn Ala Ser Gln Glu Glu Leu Met Ile Thr Leu Val Thr Gly
210 215 220
Leu Ala Ser Val Thr Ser Arg Thr Ser Met Gly Ile Ile Ile Val Gly
225 230 235 240
Gly Val Ile Trp Lys Thr Ile Gly Trp Lys Leu Leu Ser Val Ser Leu
245 250 255
Thr Met Tyr Gly Ala Leu Tyr Leu Tyr Glu Arg Leu Ser Trp Thr Thr
260 265 270
His Ala Lys Glu Arg Ala Phe Lys Gln Gln Phe Val Asn Tyr Ala Thr
275 280 285
Glu Lys Leu Arg Met Ile Val Ser Ser Thr Ser Ala Asn Cys Ser His
290 295 300
Gln Val Lys Gln Gln Ile Ala Thr Thr Phe Ala Arg Leu Cys Gln Gln
305 310 315 320
Val Asp Ile Thr Gln Lys Gln Leu Glu Glu Glu Ile Ala Arg Leu Pro
325 330 335
Lys Glu Ile Asp Gln Leu Glu Lys Ile Gln Asn Asn Ser Lys Leu Leu
340 345 350
Arg Asn Lys Ala Val Gln Leu Glu Asn Glu Leu Glu Asn Phe Thr Lys
355 360 365
Gln Phe Leu Pro Ser Ser Asn Glu Glu Ser
370 375 378

<210> 3873
<211> 285
<212> PRT
<213> Homo sapiens

<400> 3873
Pro Val Cys Thr Ala Leu Thr Pro Gly Arg Met Thr Asp Asp Lys Asp

```

1           5           10           15
Val Leu Arg Asp Val Trp Phe Gly Arg Ile Pro Thr Cys Phe Thr Leu
20           25           30
Tyr Gln Asp Glu Ile Thr Glu Arg Glu Ala Glu Pro Tyr Tyr Leu Leu
35           40           45
Leu Pro Arg Val Ser Tyr Leu Thr Leu Val Thr Asp Lys Val Lys Lys
50           55           60
His Phe Gln Lys Val Met Arg Gln Glu Asp Ile Ser Glu Ile Trp Phe
65           70           75           80
Glu Tyr Glu Gly Thr Pro Leu Lys Trp His Tyr Pro Ile Gly Leu Leu
85           90           95
Phe Asp Leu Leu Ala Ser Ser Ser Ala Leu Pro Trp Asn Ile Thr Val
100          105          110
His Phe Lys Ser Phe Pro Glu Lys Asp Leu Leu His Cys Pro Ser Lys
115          120          125
Asp Ala Ile Glu Ala His Phe Met Ser Cys Met Lys Glu Ala Asp Ala
130          135          140
Leu Lys His Lys Ser Gln Val Ile Asn Glu Met Gln Lys Lys Asp His
145          150          155          160
Lys Gln Leu Trp Met Gly Leu Gln Asn Asp Arg Phe Asp Gln Phe Trp
165          170          175
Ala Ile Asn Arg Lys Leu Met Glu Tyr Pro Ala Glu Glu Asn Gly Phe
180          185          190
Arg Tyr Ile Pro Phe Arg Ile Tyr Gln Thr Thr Thr Glu Arg Pro Phe
195          200          205
Ile Gln Lys Leu Phe Arg Pro Val Ala Ala Asp Gly Gln Leu His Thr
210          215          220
Leu Gly Asp Leu Leu Lys Glu Val Cys Pro Ser Ala Ile Asp Pro Glu
225          230          235          240
Asp Gly Glu Lys Lys Asn Gln Val Met Ile His Gly Ile Glu Pro Met
245          250          255
Leu Glu Thr Pro Leu Gln Trp Leu Ser Glu His Leu Ser Tyr Pro Asp
260          265          270
Asn Phe Leu His Ile Ser Ile Ile Pro Gln Pro Thr Asp
275          280          285

```

<210> 3874

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3874

```

Gln Ala Arg Gly Ala Pro Ser Ser Pro Met Cys Pro Leu Pro Leu Ala
1           5           10           15
Ala Ala Ala Val Ala Ala Pro Arg Ala Pro Leu Arg Leu Leu Asn Arg
20           25           30
Gly Leu Ala Ala Ala Met Ser Thr Ala Gln Ser Leu Lys Ser Val Asp
35           40           45
Tyr Glu Val Phe Gly Arg Val Gln Gly Val Cys Phe Arg Met Tyr Thr
50           55           60
Glu Asp Glu Ala Arg Lys Ile Gly Val Val Gly Trp Val Lys Asn Thr
65           70           75           80
Ser Lys Gly Thr Val Thr Gly Gln Val Gln Gly Pro Glu Asp Lys Val
85           90           95
Asn Ser Met Lys Ser Trp Leu Ser Lys Val Gly Ser Pro Ser Ser Arg
100          105          110
Ile Asp Arg Thr Asn Phe Ser Asn Glu Lys Thr Ile Ser Lys Leu Glu
115          120          125
Tyr Ser Asn Phe Ser Ile Arg Tyr
130          135          136

```

<210> 3875
 <211> 299
 <212> PRT
 <213> Homo sapiens

<400> 3875
 Ser Leu Ser Ser Cys Gln Thr Asp Pro Arg Pro Met Ser Ala Pro Leu
 1 5 10 15
 Asp Ala Ala Leu His Ala Leu Gln Glu Glu Gln Ala Arg Leu Lys Met
 20 25 30
 Arg Leu Trp Asp Leu Gln Gln Leu Arg Lys Glu Leu Gly Asp Ser Pro
 35 40 45
 Lys Asp Lys Val Pro Phe Ser Val Pro Lys Ile Pro Leu Val Phe Arg
 50 55 60
 Gly His Thr Gln Gln Asp Pro Glu Val Pro Lys Ser Leu Val Ser Asn
 65 70 75 80
 Leu Arg Ile His Cys Pro Leu Leu Ala Gly Ser Ala Leu Ile Thr Phe
 85 90 95
 Asp Asp Pro Lys Val Ala Glu Gln Val Leu Gln Gln Lys Glu His Thr
 100 105 110
 Ile Asn Met Glu Glu Cys Arg Leu Arg Val Gln Val Gln Pro Leu Glu
 115 120 125
 Leu Pro Met Val Thr Thr Ile Gln Val Met Val Ser Ser Gln Leu Ser
 130 135 140
 Gly Arg Arg Val Leu Val Thr Gly Phe Pro Ala Ser Leu Arg Leu Ser
 145 150 155 160
 Glu Glu Glu Leu Leu Asp Lys Leu Glu Ile Phe Phe Gly Lys Thr Arg
 165 170 175
 Asn Gly Gly Gly Asp Val Asp Val Arg Glu Leu Leu Pro Gly Ser Val
 180 185 190
 Met Leu Gly Phe Ala Arg Asp Gly Val Ala Gln Arg Leu Cys Gln Ile
 195 200 205
 Gly Gln Phe Thr Val Pro Leu Gly Gly Gln Gln Val Pro Leu Arg Val
 210 215 220
 Ser Pro Tyr Val Asn Gly Glu Ile Gln Lys Ala Glu Ile Arg Ser Gln
 225 230 235 240
 Pro Val Pro Arg Ser Val Leu Val Leu Asn Ile Pro Asp Ile Leu Asp
 245 250 255
 Gly Pro Glu Leu His Asp Val Leu Glu Ile His Phe Gln Lys Pro Thr
 260 265 270
 Arg Gly Gly Gly Glu Val Glu Ala Leu Thr Val Val Pro Gln Gly Gln
 275 280 285
 Gln Gly Leu Ala Val Phe Thr Ser Glu Ser Gly
 290 295 299

<210> 3876
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 3876
 Arg Met Met Lys Cys Pro Gln Ala Leu Leu Ala Ile Phe Trp Leu Leu
 1 5 10 15
 Leu Ser Trp Val Ser Ser Glu Asp Lys Val Val Gln Ser Pro Leu Ser
 20 25 30
 Leu Val Val His Glu Gly Asp Thr Val Thr Leu Asn Cys Ser Tyr Glu
 35 40 45
 Val Thr Asn Phe Arg Ser Leu Leu Trp Tyr Lys Gln Glu Lys Lys Ala

```

      50              55              60
Pro Thr Phe Leu Phe Met Leu Thr Ser Ser Gly Ile Glu Lys Lys Ser
 65              70              75              80
Gly Arg Leu Ser Ser Ile Leu Asp Lys Lys Glu Leu Ser Ser Ile Leu
      85              90              95
Asn Ile Thr Ala Thr Gln Thr Gly Asp Ser Ala Ile Tyr Leu Cys Ala
      100              105              110
Val Glu Ala Gln Cys Ser Leu Val Thr Cys Ser Leu Tyr Ser Asn Ser
      115              120              125
Thr Ala Glu Ala Leu Gln Leu
      130              135

```

<210> 3877

<211> 429

<212> PRT

<213> Homo sapiens

<400> 3877

```

Lys Ala Phe Arg Leu Leu Ala Glu Arg Gly Ala Ala Ala Ala Met Leu
 1              5              10              15
Trp Ser Gly Cys Arg Arg Phe Gly Ala Arg Leu Gly Cys Leu Pro Gly
      20              25              30
Gly Leu Arg Val Leu Val Gln Thr Gly His Arg Ser Leu Thr Ser Cys
      35              40              45
Ile Asp Pro Ser Met Gly Leu Asn Glu Glu Gln Lys Glu Phe Gln Lys
      50              55              60
Val Ala Phe Asp Phe Ala Ala Arg Glu Met Ala Pro Asn Met Ala Glu
      65              70              75              80
Trp Asp Gln Lys Glu Leu Phe Pro Val Asp Val Met Arg Lys Ala Ala
      85              90              95
Gln Leu Gly Phe Gly Gly Val Tyr Ile Gln Thr Asp Val Gly Gly Ser
      100              105              110
Gly Leu Ser Arg Leu Asp Thr Ser Val Ile Phe Glu Ala Leu Ala Thr
      115              120              125
Gly Cys Thr Ser Thr Thr Ala Tyr Ile Ser Ile His Asn Met Cys Ala
      130              135              140
Trp Met Ile Asp Ser Phe Gly Asn Glu Glu Gln Arg His Lys Phe Cys
      145              150              155              160
Pro Pro Leu Cys Thr Met Glu Lys Phe Ala Ser Tyr Cys Leu Thr Glu
      165              170              175
Pro Gly Ser Gly Ser Asp Ala Ala Ser Leu Leu Thr Ser Ala Lys Lys
      180              185              190
Gln Gly Asp His Tyr Ile Leu Asn Gly Ser Lys Ala Phe Ile Ser Gly
      195              200              205
Ala Gly Glu Ser Asp Ile Tyr Val Val Met Cys Arg Thr Gly Gly Pro
      210              215              220
Gly Pro Lys Gly Ile Ser Cys Ile Val Val Glu Lys Gly Thr Pro Gly
      225              230              235              240
Leu Ser Phe Gly Lys Lys Glu Lys Lys Val Gly Trp Asn Ser Gln Pro
      245              250              255
Thr Arg Ala Val Ile Phe Glu Asp Cys Ala Val Pro Val Ala Asn Arg
      260              265              270
Ile Gly Ser Glu Gly Gln Gly Phe Leu Ile Ala Val Arg Gly Leu Asn
      275              280              285
Gly Gly Arg Ile Asn Ile Ala Ser Cys Ser Leu Gly Ala Ala His Ala
      290              295              300
Ser Val Ile Leu Thr Arg Asp His Leu Asn Val Arg Lys Gln Phe Gly
      305              310              315              320
Glu Pro Leu Ala Ser Asn Gln Tyr Leu Gln Phe Thr Leu Ala Asp Met
      325              330              335
Ala Thr Arg Leu Val Ala Ala Arg Leu Met Val Arg Asn Ala Ala Val

```

```

      340      345      350
Ala Leu Gln Glu Glu Arg Lys Asp Ala Val Ala Leu Cys Ser Met Ala
      355      360      365
Lys Leu Phe Ala Thr Asp Glu Cys Phe Ala Ile Cys Asn Gln Ala Leu
      370      375      380
Gln Met His Gly Gly Tyr Gly Tyr Leu Lys Asp Tyr Ala Val Gln Gln
385      390      395      400
Tyr Val Arg Asp Ser Arg Val His Gln Ile Leu Glu Gly Ser Asn Glu
      405      410      415
Val Met Arg Ile Leu Ile Ser Arg Ser Leu Leu Gln Glu
      420      425      429

```

<210> 3878

<211> 335

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(335)

<223> Xaa = any amino acid or nothing

<400> 3878

```

Leu Pro Gly Ser Thr Ile Ser Ser Ser Gly Cys Gln Ala Pro Gly Arg
 1      5      10      15
Ala Asp Ser Ser Gly Gly Ala Arg Asn Ser Arg Arg Gly Asp Ser Arg
      20      25      30
Pro Gly Ser Cys Asn Arg Gln Ala Val Ala Pro Pro Cys Pro Ser Pro
      35      40      45
Gly Pro Gln Ser Arg His Trp Ile His Arg Gly Thr Ala Pro Gln Ala
      50      55      60
Gly Glu Thr Arg Thr Leu Gly Arg Gly Ser Ser Ala Pro Asn Ala Cys
      65      70      75      80
Ser Ala Ser Val Thr Pro Cys Cys Pro Ser Ser Pro Pro Ser Xaa Ser
      85      90      95
Cys Leu Xaa Pro Thr Arg Arg Ser Pro Gln Asn Ser Ser Ser Thr Glu
      100      105      110
Val Tyr Arg Gly Phe Trp Gln His Gly Leu Pro Ser Thr Xaa Xaa Pro
      115      120      125
Phe Ser Ser Xaa Gln Trp Pro Gly Gln His Thr Gln Gly Cys Ser Lys
      130      135      140
Leu Leu Gly Lys Gln Thr Thr His Leu Pro Cys Ser Thr Trp Pro Ala
      145      150      155      160
Xaa Xaa Pro Ser Pro Ser Cys Leu Thr Arg Phe Arg Xaa Trp Xaa Pro
      165      170      175
Ser Leu Met Cys Leu Trp Ala Ser Ser Cys Ser Val Cys Val Xaa Ser
      180      185      190
Pro Ser Gly Ser Cys Arg His Xaa Leu Trp Gly Thr His Ser Thr Ser
      195      200      205
Arg Thr Cys Xaa Ala Arg Arg Ser Ser Ala Leu Pro Thr Gly Leu Cys
      210      215      220
Thr Asp Asp Thr Ser Trp Ala Ser Ser Ser Lys Ala Arg Pro Cys Ala
      225      230      235      240
Leu Gln Arg Pro Ser Ser Leu Ser Ser Leu Ser Pro Cys Leu Thr Cys
      245      250      255
Xaa Trp Xaa Leu Ser Ser Ser Ser Pro Met Ser Ala Arg Ser Pro Ala
      260      265      270
Gly Ala Glu Thr Gly Ser Trp Ala Thr Gly Ser Pro Arg Leu Thr Gln
      275      280      285
Trp Lys Ser Ser Arg Leu Thr Ser Thr Ser His Ser Ala Arg Ser Ala
      290      295      300
Trp Lys Pro Ser Ala Thr Glu Ser Thr Pro Ser Trp Pro Arg Phe Ser

```

```
<210> 3879
<211> 166
<212> PRT
<213> Homo sapiens
```

```
<210> 3880
<211> 47
<212> PRT
<213> Homo sapiens
```

```
<210> 3881
<211> 354
<212> PRT
<213> Homo sapiens
```

5649

```

      20      25      30
Ala Cys Arg Ile Met Pro Thr Thr Val Asp Asp Val Leu Glu His Gly
      35      40      45
Gly Glu Phe His Phe Phe Gln Lys Gln Met Phe Phe Leu Leu Ala Leu
      50      55      60
Leu Ser Ala Thr Phe Ala Pro Ile Tyr Val Gly Ile Val Phe Leu Gly
      65      70      75      80
Phe Thr Pro Asp His Arg Cys Arg Ser Pro Gly Val Ala Glu Leu Ser
      85      90      95
Leu Arg Cys Gly Trp Ser Pro Ala Glu Glu Leu Asn Tyr Thr Val Pro
      100      105      110
Gly Pro Gly Pro Ala Gly Glu Ala Ser Pro Arg Gln Cys Arg Arg Tyr
      115      120      125
Glu Val Asp Trp Asn Gln Ser Thr Phe Asp Cys Val Asp Pro Leu Ala
      130      135      140
Ser Leu Asp Thr Asn Arg Ser Arg Leu Pro Leu Gly Pro Cys Arg Asp
      145      150      155      160
Gly Trp Val Tyr Glu Thr Pro Gly Ser Ser Ile Val Thr Glu Phe Asn
      165      170      175
Leu Val Cys Ala Asn Ser Trp Met Leu Asp Leu Phe Gln Ser Ser Val
      180      185      190
Asn Val Gly Phe Phe Ile Gly Ser Met Ser Ile Gly Tyr Ile Ala Asp
      195      200      205
Arg Phe Gly Arg Lys Leu Cys Leu Leu Thr Thr Val Leu Ile Asn Ala
      210      215      220
Ala Ala Gly Val Leu Met Ala Ile Ser Pro Thr Tyr Thr Trp Met Leu
      225      230      235      240
Ile Phe Arg Leu Ile Gln Gly Leu Val Ser Lys Ala Gly Trp Leu Ile
      245      250      255
Gly Tyr Ile Leu Ile Thr Glu Phe Val Gly Arg Arg Tyr Arg Arg Thr
      260      265      270
Val Gly Ile Phe Tyr Gln Val Ala Tyr Thr Val Gly Leu Leu Val Leu
      275      280      285
Ala Gly Val Ala Tyr Ala Leu Pro His Trp Arg Trp Leu Gln Phe Thr
      290      295      300
Val Ala Leu Pro Asn Phe Phe Leu Leu Tyr Tyr Trp Cys Ile Pro
      305      310      315      320
Glu Ser Pro Arg Trp Leu Ile Ser Gln Asn Lys Asn Ala Glu Ala Met
      325      330      335
Arg Ile Ile Lys His Ile Ala Lys Lys Asn Gly Lys Ser Leu Pro Ala
      340      345      350
Ser Leu
      354

```

<210> 3882

<211> 349

<212> PRT

<213> Homo sapiens

<400> 3882

```

Lys Ser Lys Cys Arg Phe Pro Glu Gly Leu Ser Glu Gly Phe Gly Pro
  1      5      10      15
Met Arg Lys Glu Ala Leu Ser Ser Gly Ser Val Gln Glu Ala Glu Ala
      20      25      30
Met Leu Asp Glu Pro Gln Glu Gln Ala Glu Gly Ser Leu Thr Val Tyr
      35      40      45
Val Ile Ser Glu His Ser Ser Leu Leu Pro Gln Asp Met Met Ser Tyr
      50      55      60
Ile Gly Pro Lys Arg Thr Ala Val Val Arg Gly Ile Met His Arg Glu
      65      70      75      80
Ala Phe Asn Ile Ile Gly Arg Arg Ile Val Gln Val Ala Gln Ala Met

```



```
<210> 3883
<211> 510
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(508)
<223> Xaa = any amino acid or nothing
```

<400> 3883															
Arg	Ile	His	Arg	Glu	Glu	Asp	Phe	Gln	Phe	Ile	Leu	Lys	Gly	Ile	Ala
1				5					10					15	
Arg	Leu	Leu	Ser	Asn	Pro	Leu	Leu	Gln	Thr	Tyr	Leu	Pro	Asn	Ser	Thr
			20					25					30		
Lys	Lys	Ile	Gln	Phe	His	Gln	Glu	Leu	Leu	Val	Leu	Phe	Trp	Lys	Leu
		35					40					45			
Cys	Asp	Phe	Asn	Lys	Val	Gly	Gln	Pro	Arg	Gly	Ala	Leu	Gln	Gly	Asp
	50					55					60				
Gly	Glu	Gln	Leu	Pro	Gln	Xaa	Pro	Gly	Gly	Arg	Asp	Ser	Val	Arg	Leu
65					70				75					80	
Arg	Gly	Val	Gly	Gln	Ser	Cys	Pro	Ser	Leu	Glu	Leu	Ser	Pro	Leu	Gly
				85				90						95	
Pro	Ser	Pro	His	Pro	Xaa	Lys	Phe	Leu	Phe	Phe	Val	Leu	Lys	Ser	Ser
			100				105						110		
Asp	Val	Leu	Asp	Ile	Leu	Val	Pro	Ile	Leu	Phe	Phe	Leu	Asn	Asp	Ala
		115					120					125			
Arg	Ala	Asp	Gln	Ser	Arg	Val	Gly	Leu	Met	His	Ile	Gly	Val	Phe	Ile

```

      130              135              140
Leu Leu Leu Leu Ser Gly Glu Cys Asn Phe Gly Val Arg Leu Asn Lys
145              150              155              160
Pro Tyr Ser Ile Arg Val Pro Met Asp Ile Pro Val Phe Thr Gly Thr
      165              170              175
His Ala Asp Leu Leu Ile Val Val Phe His Lys Ile Ile Thr Ser Gly
      180              185              190
His Gln Arg Leu Gln Pro Leu Phe Asp Cys Leu Leu Thr Ile Val Val
      195              200              205
Asn Val Ser Pro Tyr Leu Lys Ser Leu Ser Met Val Thr Ala Asn Lys
      210              215              220
Leu Leu His Leu Leu Glu Ala Phe Ser Thr Thr Trp Phe Leu Phe Ser
225              230              235              240
Ala Ala Gln Asn His His Leu Val Phe Phe Leu Leu Glu Val Phe Asn
      245              250              255
Asn Ile Ile Gln Tyr Gln Phe Asp Gly Asn Ser Asn Leu Val Tyr Ala
      260              265              270
Ile Ile Arg Lys Arg Ser Ile Phe His Gln Leu Ala Asn Leu Pro Thr
      275              280              285
Asp Pro Pro Thr Ile His Lys Ala Leu Gln Arg Arg Arg Arg Thr Pro
      290              295              300
Glu Pro Leu Ser Arg Thr Gly Ser Gln Gly Gly Ala Pro Pro Trp Arg
305              310              315              320
Ala Pro Ala Pro Leu Pro Leu Gln Ser Gln Ala Pro Ser Arg Pro Val
      325              330              335
Trp Trp Leu Leu Gln Ala Leu Thr Ser Xaa Pro Arg Ser Pro Arg Cys
      340              345              350
Gln Arg Met Ala Pro Cys Gly Pro Trp Asn Leu Ser Pro Ser Arg Ala
      355              360              365
Trp Arg Met Ala Ala Arg Leu Arg Gly Ser Pro Ala Arg His Gly Gly
      370              375              380
Ser Ser Gly Asp Arg Pro His Ser Ser Ala Ser Gly Gln Trp Ser Pro
385              390              395              400
Thr Pro Glu Trp Val Leu Ser Trp Lys Ser Lys Leu Pro Leu Gln Thr
      405              410              415
Ile Met Arg Leu Leu Gln Val Leu Val Pro Gln Val Glu Lys Ile Cys
      420              425              430
Ile Asp Lys Gly Leu Thr Asp Glu Ser Glu Ile Leu Arg Phe Leu Gln
      435              440              445
His Gly Thr Leu Val Gly Leu Leu Pro Val Pro His Pro Ile Leu Ile
      450              455              460
Arg Lys Tyr Gln Ala Asn Ser Gly Thr Ala Met Trp Phe Arg Thr Tyr
465              470              475              480
Met Trp Gly Val Ile Tyr Leu Arg Asn Val Asp Pro Pro Val Trp Tyr
      485              490              495
Asp Thr Asp Val Lys Leu Phe Glu Ile Gln Arg Val
      500              505              508

```

<210> 3884

<211> 268

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(267)

<223> Xaa = any amino acid or nothing

<400> 3884

```

Asn Gly Pro Arg Ala Pro Phe Ser Gln Glu Gly Gln Ser Thr Gly Pro
 1              5              10              15
Pro Pro Leu Ile Pro Arg Leu Gly Gln His Gly Ala Gln Gly Arg Ile

```

```
<210> 3885
<211> 332
<212> PRT
<213> Homo sapiens
```

<400> 3885																
Gly 1	Arg	Arg	Arg	Ala 5	Gly	Pro	Ala	His	Ser 10	Ala	Arg	Met	Tyr	Asn 15	Met	
Met	Glu	Thr	Glu 20	Leu	Lys	Pro	Pro	Gly 25	Pro	Gln	Gln	Thr	Ser 30	Gly	Gly	
Gly	Gly	Gly 35	Asn	Ser	Thr	Ala	Ala	Ala 40	Ala	Gly	Gly	Asn 45	Gln	Lys	Asn	
Ser 50	Pro	Asp	Arg	Val	Lys	Arg 55	Pro	Met	Asn	Ala	Phe 60	Met	Val	Trp	Ser	
Arg 65	Gly	Gln	Arg	Arg	Lys 70	Met	Ala	Gln	Glu	Asn 75	Pro	Lys	Met	His 80	Asn	
Ser	Glu	Ile	Ser 85	Lys	Arg	Leu	Gly	Ala 90	Glu	Trp	Lys	Leu	Leu	Ser 95	Glu	
Thr	Glu	Lys	Arg 100	Pro	Phe	Ile	Asp	Glu 105	Ala	Lys	Arg	Leu	Arg 110	Ala	Leu	
His	Met	Lys 115	Glu	His	Pro	Asp	Tyr 120	Lys	Tyr	Arg	Pro	Arg 125	Arg	Lys	Thr	
Lys 130	Thr	Leu	Met	Lys	Lys	Asp 135	Lys	Tyr	Thr	Leu	Pro 140	Gly	Gly	Leu	Leu	
Ala 145	Pro	Gly	Gly	Asn 150	Ser	Met	Ala	Ser	Gly 155	Val	Gly	Val	Gly	Ala 160	Gly	
Leu	Gly	Ala	Gly 165	Val	Asn	Gln	Arg	Met	Asp 170	Ser	Tyr	Ala	His 175	Met	Asn	
Gly	Trp	Ser	Asn	Gly	Ser	Tyr	Ser	Met	Met	Gln	Asp	Gln	Leu	Gly	Tyr	

```

      180      185      190
Pro Gln His Pro Gly Leu Asn Ala His Gly Ala Ala Gln Met Gln Pro
      195      200      205
Met His Arg Tyr Asp Val Ser Ala Leu Gln Tyr Asn Ser Met Thr Ser
      210      215      220
Ser Gln Thr Tyr Met Asn Gly Ser Arg Pro Thr Tyr Ser Met Ser Tyr
      225      230      235      240
Ser Gln Gln Gly Thr Pro Gly Met Ala Pro Gly Ser Met Gly Ser Val
      245      250      255
Val Lys Ser Glu Ala Ser Ser Ser Pro Pro Val Val Thr Ser Ser Ser
      260      265      270
His Ser Arg Ala Pro Cys Gln Ala Gly Asp Leu Arg Asp Met Ile Ser
      275      280      285
Met Tyr Leu Pro Gly Ala Glu Val Pro Glu Pro Ala Ala Pro Ser Arg
      290      295      300
Leu His Met Ser Gln His Tyr Gln Ser Gly Pro Val Pro Gly Thr Ala
      305      310      315      320
Ile Asn Gly Thr Leu Pro Leu Ser His Met
      325      330

```

<210> 3886
 <211> 154
 <212> PRT
 <213> Homo sapiens

```

      <400> 3886
Gln Cys Thr Gln Lys Ala Ala Glu Gly Tyr Thr Gln Phe Tyr Tyr Val
      1      5      10      15
Asp Val Leu Asp Gly Lys Leu Ala Cys Val Asn Lys Cys Thr Lys Gly
      20      25      30
Thr Lys Ser Gln Met Asn Cys Asn Leu Gly Thr Cys Gln Leu Gln Arg
      35      40      45
Ser Gly Pro Arg Cys Leu Cys Pro Asn Thr Asn Thr His Trp Tyr Trp
      50      55      60
Gly Glu Thr Cys Glu Phe Asn Ile Ala Lys Ser Leu Val Tyr Gly Ile
      65      70      75      80
Val Gly Ala Val Met Ala Val Leu Leu Leu Ala Leu Ile Ile Leu Ile
      85      90      95
Ile Leu Phe Ser Leu Ser Gln Arg Lys Arg His Arg Pro Glu Ser Glu
      100      105      110
Gly Glu Ala Asp Phe Gly Leu Glu Asn Ala Thr Asn Asn Phe Gly Pro
      115      120      125
Thr Leu Glu Thr Val Asp Ser Gly Thr Glu Leu His Ile Gln Arg Pro
      130      135      140
Glu Met Val Ala Ser Thr Val
      145      150      151

```

<210> 3887
 <211> 154
 <212> PRT
 <213> Homo sapiens

```

      <400> 3887
Val Asp Phe Arg Val Lys Thr Leu Leu Val Asp Asn Lys Cys Phe Val
      1      5      10      15
Leu Gln Leu Trp Asp Thr Ala Gly Gln Glu Arg Tyr His Ser Met Thr
      20      25      30
Arg Gln Leu Leu Arg Lys Ala Asp Gly Val Val Leu Met Tyr Asp Ile

```

```
<210> 3888
<211> 89
<212> PRT
<213> Homo sapiens
```

```
<210> 3889
<211> 386
<212> PRT
<213> Homo sapiens
```

5655

```

      130              135              140
Val Gly Ala Ala Ala Cys Leu Gly Gly Val Thr Arg Met Thr Val Ser
145              150              155              160
Leu Val Val Ile Met Phe Glu Leu Thr Gly Gly Leu Glu Tyr Ile Val
      165              170              175
Pro Leu Met Ala Ala Ala Met Thr Ser Lys Trp Val Ala Asp Ala Leu
      180              185              190
Gly Arg Glu Gly Ile Tyr Asp Ala His Ile Arg Leu Asn Gly Tyr Pro
      195              200              205
Phe Leu Glu Ala Lys Glu Glu Phe Ala His Lys Thr Leu Ala Met Asp
      210              215              220
Val Met Lys Pro Arg Arg Asn Asp Pro Leu Leu Thr Val Leu Thr Gln
225              230              235              240
Asp Ser Met Thr Val Glu Asp Val Glu Thr Ile Ile Ser Glu Thr Thr
      245              250              255
Tyr Ser Gly Phe Pro Val Val Val Ser Arg Glu Ser Gln Arg Leu Val
      260              265              270
Gly Phe Val Leu Arg Arg Asp Leu Ile Ile Ser Ile Glu Asn Ala Arg
      275              280              285
Lys Lys Gln Asp Gly Val Val Ser Thr Ser Ile Ile Tyr Phe Thr Glu
      290              295              300
His Ser Pro Pro Leu Pro Tyr Thr Pro Pro Thr Leu Lys Leu Arg
305              310              315              320
Asn Ile Leu Asp Leu Ser Pro Phe Thr Val Thr Asp Leu Thr Pro Met
      325              330              335
Glu Ile Val Val Asp Ile Phe Arg Lys Leu Gly Leu Arg Gln Cys Leu
      340              345              350
Val Thr His Asn Gly Arg Leu Leu Gly Ile Ile Thr Lys Lys Asp Val
      355              360              365
Leu Lys His Ile Ala Gln Met Ala Asn Gln Asp Pro Asp Ser Ile Leu
      370              375              380
Phe Asn
385 386

```

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<210> 3890
<211> 129
<212> PRT
<213> Homo sapiens

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```

      <400> 3890
Ser Trp Cys Trp Thr Gly Ile Phe Val Leu Gly Thr Thr Asn Leu Arg
  1              5              10              15
Leu Glu Gly Ser Trp Tyr Arg Ser Leu Trp Gly Pro Gly Phe Asn Thr
      20              25              30
Thr Thr Ala Thr Leu Gly Phe Gly Ala Pro Gln Ala Pro Val Gly Asp
      35              40              45
Val Ala Leu Asn Gln Pro Asp Met Cys Val Tyr Arg Arg Gly Arg Lys
      50              55              60
Lys Arg Val Pro Tyr Thr Lys Leu Gln Leu Lys Glu Leu Glu Asn Glu
      65              70              75              80
Tyr Ala Ile Asn Lys Phe Ile Asn Lys Asp Lys Arg Arg Arg Ile Ser
      85              90              95
Ala Ala Thr Asn Leu Ser Glu Arg Gln Val Thr Ile Trp Phe Gln Asn
      100              105              110
Arg Arg Val Lys Asp Lys Lys Ile Val Ser Lys Leu Lys Asp Thr Val
      115              120              125
Ser
129

```

<210> 3891
 <211> 978
 <212> PRT
 <213> Homo sapiens

<221> misc_feature
 <222> (1)...(967)
 <223> Xaa = any amino acid or nothing

<400> 3891
 Arg Gly Gly Gly Gly Asp His Lys Met Ala Asp Leu Ser Leu Leu Gln
 1 5 10 15
 Glu Asp Leu Gln Glu Asp Ala Asp Gly Phe Gly Val Asp Asp Tyr Ser
 20 25 30
 Ser Glu Ser Asp Val Ile Ile Ile Pro Ser Ala Leu Asp Leu Ala Ser
 35 40 45
 Thr Gln Asp Glu Met Val Glu Arg Pro Leu Gly Arg Leu Asp Lys Tyr
 50 55 60
 Ala Ala Ser Glu Asn His Ile Xaa Pro Asp Lys Met Val Ala Pro Glu
 65 70 75 80
 Phe Ala Ser Ile Pro Leu Arg Glu Val Cys Asp Asp Glu Arg Asp Cys
 85 90 95
 Ile Ala Val Leu Gly Lys Asn Xaa Pro Asp Trp Ala Asp Asp Ser Glu
 100 105 110
 Pro Thr Val Arg Ala Ala Glu Leu Glu Gln Val Pro His Ile Ala Leu
 115 120 125
 Phe Leu Phe Lys Lys Thr Arg Leu Ser Ile Thr Ile Cys Phe Phe Ser
 130 135 140
 Lys Phe Leu Leu Pro Tyr Cys Gly Leu Asp Thr Leu Ala Asp Gln Asn
 145 150 155 160
 Asn Gln Val Arg Lys Thr Ser Gln Ala Ala Leu Leu Ala Leu Leu Glu
 165 170 175
 Gln Glu Leu Ile Glu Arg Phe Asp Val Glu Thr Lys Val Cys Pro Val
 180 185 190
 Leu Ile Glu Leu Thr Ala Pro Asp Ser Asn Asp Asp Val Lys Thr Glu
 195 200 205
 Ala Val Ala Ile Met Cys Lys Met Ala Pro Met Val Gly Lys Asp Ile
 210 215 220
 Thr Glu Arg Leu Ile Leu Pro Arg Phe Cys Glu Met Cys Cys Asp Cys
 225 230 235 240
 Arg Met Phe His Val Arg Lys Val Cys Ala Ala Asn Phe Gly Asp Ile
 245 250 255
 Cys Ser Val Val Gly Gln Gln Ala Thr Glu Glu Met Leu Leu Pro Arg
 260 265 270
 Phe Phe Gln Leu Cys Ser Asp Asn Val Trp Gly Val Arg Lys Ala Cys
 275 280 285
 Ala Glu Cys Phe Met Ala Val Ser Cys Ala Thr Cys Gln Glu Ile Arg
 290 295 300
 Arg Thr Lys Leu Ser Ala Leu Phe Ile Asn Leu Ile Ser Asp Pro Ser
 305 310 315 320
 Arg Trp Val Arg Gln Ala Ala Phe Gln Ser Leu Gly Pro Phe Ile Ser
 325 330 335
 Thr Phe Ala Asn Pro Ser Ser Ser Gly Gln Tyr Phe Lys Glu Glu Ser
 340 345 350
 Lys Ser Ser Glu Glu Met Ser Val Glu Asn Asn Lys Arg Thr Arg Asp
 355 360 365
 Gln Glu Ala Pro Glu Asp Val Gln Val Arg Pro Glu Asp Thr Pro Ser
 370 375 380
 Asp Leu Ser Val Ser Asn Ser Ser Val Ile Leu Glu Asn Thr Met Glu
 385 390 395 400
 Asp His Ala Ala Glu Ala Ser Gly Lys Pro Leu Gly Glu Ile Ser Val
 405 410 415
 Pro Leu Asp Ser Ser Leu Leu Cys Thr Leu Ser Ser Glu Ser His Gln

5658

930	935	940
Phe Ala Ser Ile His	Pro Ala Ser Thr Lys	Ile Ser Glu Asp Ala Met
945	950	955
Ser Thr Ala Ser Ser Thr Tyr		960
	965	967

<210> 3892
 <211> 679
 <212> PRT
 <213> Homo sapiens

<400> 3892

Val	Pro	Leu	Pro	Ala	Pro	Ser	Gly	Leu	Ser	Gly	Gly	Gly	Ser	Arg	Gly
1				5					10					15	
Ala	Gly	Cys	Lys	Lys	Ala	Pro	Pro	Gly	Arg	Ala	Pro	Ala	Pro	Gly	Leu
			20					25					30		
Ala	Pro	Leu	Arg	Pro	Ser	Glu	Pro	Thr	Met	Ala	Val	Pro	Pro	Gly	His
		35					40					45			
Gly	Pro	Phe	Ser	Gly	Phe	Pro	Gly	Pro	Gln	Glu	His	Thr	Gln	Val	Leu
	50					55					60				
Pro	Asp	Val	Arg	Leu	Leu	Pro	Arg	Arg	Leu	Pro	Leu	Ala	Phe	Arg	Asp
	65				70					75					80
Ala	Thr	Ser	Ala	Pro	Leu	Arg	Lys	Leu	Ser	Val	Asp	Leu	Ile	Lys	Thr
				85					90					95	
Tyr	Lys	His	Ile	Asn	Glu	Val	Tyr	Tyr	Ala	Lys	Lys	Lys	Arg	Arg	Ala
			100					105					110		
Gln	Gln	Ala	Pro	Pro	Gln	Asp	Ser	Ser	Asn	Lys	Lys	Glu	Lys	Lys	Val
		115				120						125			
Leu	Asn	His	Gly	Tyr	Asp	Asp	Asp	Asn	His	Asp	Tyr	Ile	Val	Arg	Ser
	130					135					140				
Gly	Glu	Arg	Trp	Leu	Glu	Arg	Tyr	Glu	Ile	Asp	Ser	Leu	Ile	Gly	Lys
	145				150					155					160
Gly	Ser	Phe	Gly	Gln	Val	Val	Lys	Ala	Tyr	Asp	His	Gln	Thr	Gln	Glu
			165						170					175	
Leu	Val	Ala	Ile	Lys	Ile	Ile	Lys	Asn	Lys	Lys	Ala	Phe	Leu	Asn	Gln
			180					185					190		
Ala	Gln	Ile	Glu	Leu	Arg	Leu	Leu	Glu	Leu	Met	Asn	Gln	His	Asp	Thr
		195				200						205			
Glu	Met	Lys	Tyr	Tyr	Ile	Val	His	Leu	Lys	Arg	His	Phe	Met	Phe	Arg
	210					215					220				
Asn	His	Leu	Cys	Leu	Val	Phe	Glu	Leu	Leu	Ser	Tyr	Asn	Leu	Tyr	Asp
	225				230					235					240
Leu	Leu	Arg	Asn	Thr	His	Phe	Arg	Gly	Val	Ser	Leu	Asn	Leu	Thr	Arg
			245						250					255	
Lys	Leu	Ala	Gln	Gln	Leu	Cys	Thr	Ala	Leu	Leu	Phe	Leu	Ala	Thr	Pro
			260					265					270		
Glu	Leu	Ser	Ile	Ile	His	Cys	Asp	Leu	Lys	Pro	Glu	Asn	Ile	Leu	Leu
		275					280					285			
Cys	Asn	Pro	Lys	Arg	Ser	Ala	Ile	Lys	Ile	Val	Asp	Phe	Gly	Ser	Ser
	290					295					300				
Cys	Gln	Leu	Gly	Gln	Arg	Ile	Tyr	Gln	Tyr	Ile	Gln	Ser	Arg	Phe	Tyr
	305				310					315					320
Arg	Ser	Pro	Glu	Val	Leu	Leu	Gly	Thr	Pro	Tyr	Asp	Leu	Ala	Ile	Asp
			325						330					335	
Met	Trp	Ser	Leu	Gly	Cys	Ile	Leu	Val	Glu	Met	His	Thr	Gly	Glu	Pro
			340					345					350		
Leu	Phe	Ser	Gly	Ser	Asn	Glu	Val	Cys	Pro	Gln	Glu	Gly	Val	Asp	Gln
		355				360						365			
Met	Asn	Arg	Ile	Val	Glu	Val	Leu	Gly	Ile	Pro	Pro	Ala	Ala	Met	Leu
	370					375					380				
Asp	Gln	Ala	Pro	Lys	Ala	Arg	Lys	Tyr	Phe	Glu	Arg	Leu	Pro	Gly	Gly

```

385          390          395          400
Gly Trp Thr Leu Arg Arg Thr Lys Glu Leu Arg Lys Asp Tyr Gln Gly
          405          410          415
Pro Gly Thr Arg Arg Leu Gln Glu Val Leu Gly Val Gln Thr Gly Gly
          420          425          430
Pro Gly Gly Arg Arg Ala Gly Glu Pro Gly His Ser Pro Ala Asp Tyr
          435          440          445
Leu Arg Phe Gln Asp Leu Val Leu Arg Met Leu Glu Tyr Glu Pro Ala
          450          455          460
Ala Arg Ile Ser Pro Leu Gly Ala Leu Gln His Gly Phe Phe Arg Arg
          465          470          475          480
Thr Ala Asp Glu Ala Thr Asn Thr Gly Pro Ala Gly Ser Ser Ala Ser
          485          490          495
Thr Ser Pro Ala Pro Leu Asp Thr Cys Pro Ser Ser Ser Thr Ala Ser
          500          505          510
Ser Ile Ser Ser Ser Gly Gly Ser Ser Gly Ser Ser Ser Asp Asn Arg
          515          520          525
Thr Tyr Arg Tyr Ser Asn Arg Tyr Cys Gly Gly Pro Gly Pro Pro Ile
          530          535          540
Thr Asp Cys Glu Met Asn Ser Pro Gln Val Pro Pro Ser Gln Pro Leu
          545          550          555          560
Arg Pro Trp Ala Gly Gly Asp Val Pro His Lys Thr His Gln Ala Pro
          565          570          575
Ala Ser Ala Ser Ser Leu Pro Gly Thr Gly Ala Gln Leu Pro Pro Gln
          580          585          590
Pro Arg Tyr Leu Gly Arg Pro Pro Ser Pro Thr Ser Pro Pro Pro Pro
          595          600          605
Glu Leu Met Asp Val Ser Leu Val Gly Gly Pro Ala Asp Cys Ser Pro
          610          615          620
Pro His Pro Ala Pro Ala Pro Gln His Pro Ala Ala Ser Ala Leu Arg
          625          630          635          640
Thr Arg Met Thr Gly Gly Arg Pro Pro Leu Pro Pro Pro Asp Asp Pro
          645          650          655
Ala Thr Leu Gly Pro His Leu Gly Leu Arg Gly Val Pro Gln Ser Thr
          660          665          670
Ala Ala Ser Ser
          675 676

```

<210> 3893

<211> 63

<212> PRT

<213> Homo sapiens

<400> 3893

```

Pro Glu Glu Tyr Tyr Pro Phe Ser Pro Thr Leu Gln Gln Leu Phe Phe
  1          5          10          15
Phe Leu Leu Asp Ser Asp Met Gly Ser Arg Pro Glu Ser Met Gly Cys
          20          25          30
Arg Lys Asn Thr Val Pro Arg Pro Ala Ser Pro Thr Glu Ala Gly Thr
          35          40          45
Asp Pro Gln Thr Phe Leu His Thr Trp Val Ser Glu Cys Arg Asp
          50          55          60          63

```

<210> 3894

<211> 329

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(328)

<223> Xaa = any amino acid or nothing

<400> 3894

```

Ser Leu Pro Leu Ala Pro Ala Val Ala Gly Pro Val Ala Leu
 1          5          10          15
Cys Pro Ala Gly Leu Cys Pro Ala Gln Pro Gly Met Pro Ala Gly Pro
      20          25          30
Ala Ala Ala Ser Gly Ser His Pro Glu Val Gly Ser Val Leu Gln Arg
      35          40          45
Ser Ser Gln Pro His Trp Pro Asn Pro Trp Pro Gly Ala Gly His Leu
 50          55          60
Pro Pro Pro Ala Gly Pro Phe Pro Tyr Asn Pro Ala Gly Pro Gly
 65          70          75          80
Ala Ala Ala Gly Leu Ala Xaa Ser Pro Pro Arg Ser Ser Pro Thr Pro
      85          90          95
Cys Ser Val Gly Pro Gln Ser Cys Pro Ala Asn Ala Ser Ala Pro Pro
      100          105          110
Ala Gln Pro Cys Leu Ala Gly Ala Pro Pro Ala Ala Ser Leu Pro Pro
      115          120          125
Pro Gly Pro Gly Ser Val Ser Ala Ala Pro Ala Pro Gly Gly Pro Ala
 130          135          140
Pro Ala Glu Pro Pro Leu Gly Val Pro Pro Val Pro Ala Trp Leu Leu
 145          150          155          160
Pro Asp Ser Pro Pro Leu Pro Gly Thr His Ser Gly Pro Pro Pro Ala
      165          170          175
Ala Val Ser Leu Pro Pro Ala Ala Ala Cys Pro Val Val Val Pro
      180          185          190
Pro Pro Leu Pro His His Pro Pro Asp Leu Glu Ser Pro Ser Ala Ala
 195          200          205
Ala Pro Asn Pro Gly Cys Ala Gly Gly Ile Arg His Phe Pro Pro Gly
 210          215          220
Ser Pro Glu Ala Ser Ser Pro Leu Arg Pro Ala Ala Ala Pro Ala Leu
 225          230          235          240
Leu Pro Leu Pro Arg Pro Pro Ser Xaa Pro Val Pro Trp Lys Pro Leu
      245          250          255
His Ser Pro Val Ala Val Ala Gly Gly Ser Phe Val Ala Gly Gly Ser
      260          265          270
Val Leu Pro Ala Pro Asp Leu Asp Gln Pro Arg Pro Ser Gly Pro Pro
      275          280          285
Ala Ala Ser Pro Thr Pro Gly Pro Gly Val Ala Gln Pro Pro Pro Gly
      290          295          300
Ser Ala Val Leu Pro Thr Val Pro Xaa Ala Pro Pro Val Ser Gly Ala
 305          310          315          320
Ala Pro Gly Arg Lys Arg Glu Trp
      325          328

```

<210> 3895

<211> 450

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(448)

<223> Xaa = any amino acid or nothing

<400> 3895

```

Phe Gly Ala Val Ser Tyr Arg Pro Gly Asn Gly Ser Cys Trp Val Lys
 1          5          10          15
Val Thr Ala Ser Ser Asp Leu Ser Asp Leu Ile Ser Cys Leu Cys Pro

```

```
<210> 3896
<211> 99
<212> PRT
<213> Homo sapiens
```

<400> 3896
 Met Val Gln Ser Cys Ser Ala Tyr Gly Cys Lys Asn Arg Tyr Asp Lys
 1 5 10 15
 Asp Lys Pro Val Ser Phe His Lys Phe Pro Leu Thr Arg Pro Ser Leu
 20 25 30
 Cys Lys Glu Trp Glu Ala Ala Val Arg Arg Lys Asn Phe Lys Pro Thr
 35 40 45
 Lys Tyr Ser Ser Ile Cys Ser Glu His Phe Thr Pro Asp Cys Phe Lys
 50 55 60
 Arg Glu Cys Asn Asn Lys Leu Leu Lys Glu Asn Ala Val Pro Thr Ile
 65 70 75 80
 Phe Leu Cys Thr Glu Pro His Asp Lys Lys Glu Asp Leu Leu Glu Pro
 85 90 95
 Gln Glu Gln
 99

<210> 3897
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 3897
 Ser His Gly Leu Ser Arg Ala Pro His Leu Ser Ala Ala Pro Ala Pro
 1 5 10 15
 Ala Leu Ala Ser Arg Pro Cys Phe Ser Ser Ala Pro Cys Ser Gln Gly
 20 25 30
 Gly Gly Gly Gly Gly Pro Ala Thr Met Ile His Phe Ile Leu Leu Phe
 35 40 45
 Ser Arg Gln Gly Lys Leu Arg Leu Gln Lys Trp Tyr Ile Thr Leu Pro
 50 55 60
 Asp Lys Glu Arg Lys Lys Ile Thr Arg Glu Ile Val Gln Ile Ile Leu
 65 70 75 80
 Ser Arg Gly His Arg Thr Ser Ser Phe Val Asp Trp Lys Glu Leu Lys
 85 90 95
 Leu Val Tyr Lys Arg Tyr Ala Ser Leu Tyr Phe Cys Cys Ala Ile Glu
 100 105 110
 Asn Gln Asp Asn Glu Leu Leu Thr Leu Glu Asn Val His Arg
 115 120 125 126

<210> 3898
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 3898
 Ser Glu Gln Glu Pro Leu Leu Gly Asp Thr Pro Gly Ser Arg Glu Trp
 1 5 10 15
 Asp Ile Leu Glu Thr Glu Glu His Tyr Lys Ser Arg Trp Arg Ser Ile
 20 25 30
 Arg Ile Leu Tyr Leu Thr Met Phe Leu Ser Ser Val Gly Phe Ser Val
 35 40 45
 Val Met Met Ser Ile Trp Pro Tyr Leu Gln Lys Ile Asp Pro Thr Ala
 50 55 60
 Asp Thr Ser Phe Leu Gly Trp Val Ile Ala Ser Tyr Ser Leu Gly Gln
 65 70 75 80
 Met Val Ala Ser Pro Ile Phe Gly Leu Trp Ser Asn Tyr Arg Pro Arg
 85 90 95
 Lys Glu Pro Leu Ile Val Ser Ile Leu Ile Ser Val Ala Ala Asn Cys

100 105 110
 Leu Tyr Ala Tyr Leu His Ile Pro Ala Ser His Asn Lys Tyr Tyr Met
 115 120 125
 Leu Val Ala Arg Gly Leu Leu Gly Ile Gly
 130 135 138

<210> 3899
 <211> 234
 <212> PRT
 <213> Homo sapiens

<400> 3899
 Phe Arg Gly Arg Pro Gly Ile Pro Glu Arg Glu Gly Lys Gly Asn His
 1 5 10 15
 Ser Phe Val Glu Val Ala Arg Val Ile Val Val Asp Leu His Ser Arg
 20 25 30
 Leu Gly Gly Ala Met Ala Glu Arg Lys Gly Thr Ala Lys Val Asp Phe
 35 40 45
 Leu Lys Lys Ile Glu Lys Glu Ile Gln Gln Lys Trp Asp Thr Glu Arg
 50 55 60
 Val Phe Glu Val Asn Ala Ser Asn Leu Glu Lys Gln Thr Ser Lys Gly
 65 70 75 80
 Lys Tyr Phe Val Thr Phe Pro Tyr Pro Tyr Met Asn Gly Arg Leu His
 85 90 95
 Leu Gly His Thr Phe Ser Leu Ser Lys Cys Glu Phe Ala Val Gly Tyr
 100 105 110
 Gln Arg Leu Lys Gly Lys Cys Cys Leu Phe Pro Phe Gly Leu His Cys
 115 120 125
 Thr Gly Met Pro Ile Lys Ala Cys Ala Asp Lys Leu Lys Arg Glu Ile
 130 135 140
 Glu Leu Tyr Gly Cys Pro Pro Asp Phe Pro Asp Glu Glu Glu Glu
 145 150 155 160
 Glu Glu Thr Ser Val Lys Thr Glu Asp Ile Ile Lys Asp Lys Ala
 165 170 175
 Lys Gly Lys Lys Ser Lys Ala Ala Ala Lys Ala Gly Ser Ser Lys Tyr
 180 185 190
 Gln Trp Gly Ile Met Lys Ser Leu Gly Leu Ser Asp Glu Glu Ile Val
 195 200 205
 Lys Phe Ser Glu Ala Glu His Trp Leu Asp Tyr Phe Asn Ala Leu Ala
 210 215 220
 Ile Gln Asp Leu Lys Arg Met Gly
 225 230 232

<210> 3900
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 3900
 Val Pro Ala Thr Ser Ser Asn Val Ser Pro Ser Ser Ser Glu Ser Ser
 1 5 10 15
 Glu Pro Asp Leu Ser Ser Arg Ser Ser Ser Ser Asp Ala Pro Ser Ser
 20 25 30
 Ser Pro Ser Val Pro Ser Pro Cys Ser Leu Ser Leu Ser Ser Pro Glu
 35 40 45
 Ser Pro Leu Leu Pro Thr Leu Leu Ser Ser Lys Ser Pro Ala Gly Ser
 50 55 60
 Ala Gly Pro Thr Cys Gly Cys Pro Ser Gly Pro Gly Leu Arg Ala Thr

```

      65              70              75              80
Ala Pro Ser Arg Leu Ser Ser Ser Ile Ala Ala His Ser Ser Ser Ala
      85              90              95
Pro Glu Thr Ser Arg Pro Ala Ala Ala Arg Glu Arg Ser Pro Pro Leu
      100             105             110
His Asp Arg Arg Glu Ser His Glu
      115             119

```

```

<210> 3901
<211> 51
<212> PRT
<213> Homo sapiens

```

```

<400> 3901
Gly Glu Trp Ala Val Pro Pro Ala Pro Gly Gly Gln Gly Val Ser Ile
 1              5              10              15
Pro His Gly Pro Glu Pro Gly Gln Gly Ser Gly Val His Ile Ala Pro
      20             25             30
Arg Gln Gly Glu Gly Ser Asp Arg Thr Glu Pro Leu Ile Cys Pro Lys
      35             40             45
Ala Ala Pro
      50 51

```

```

<210> 3902
<211> 68
<212> PRT
<213> Homo sapiens

```

```

<400> 3902
Asn Pro Ala Ala Arg Ser Ala Ala Ala Arg Glu Gly Ser Pro Ala Leu
 1              5              10              15
Pro Pro Pro Pro Val Ser Ser Ser Ser Gly Leu Gly Leu Leu Leu Pro
      20             25             30
Leu Ser Pro Pro Gly Ser His Ala Ala Asn Pro Ala Leu Ser Pro Arg
      35             40             45
Ala Pro His Ser His Tyr Arg Pro Arg Pro Arg Cys Gly Pro Arg Arg
      50             55             60
Arg Pro Arg
      65 67

```

```

<210> 3903
<211> 111
<212> PRT
<213> Homo sapiens

```

```

<221> misc_feature
<222> (1)...(111)
<223> Xaa = any amino acid or nothing

```

```

<400> 3903
Asn Asn Met Arg Asn Pro His Leu Ser Ser Asn His Tyr Leu Asn Leu
 1              5              10              15
Ala Arg Thr Glu Thr Val Phe Ala Arg Met Glu Ser Val Lys Gln Arg
      20             25             30
Ile Leu Ala Pro Gly Lys Glu Gly Leu Lys Asn Phe Ala Gly Lys Ser

```

```

      35              40              45
Leu Gly Gln Ile Tyr Arg Val Leu Glu Lys Lys Gln Asp Thr Gly Glu
  50              55              60
Thr Ile Glu Leu Thr Glu Asp Gly Lys Pro Leu Xaa Val Pro Glu Arg
  65              70              75              80
Lys Ala Pro Leu Cys Asp Cys Thr Cys Phe Gly Leu Pro Arg Arg Tyr
      85              90              95
Ile Ile Ala Ile Met Ser Gly Leu Gly Phe Cys Ile Ser Phe Gly
      100              105              110 111

```

<210> 3904

<211> 104

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(104)

<223> Xaa = any amino acid or nothing

<400> 3904

```

Ala Met Ser Glu Cys Pro Leu Ile Leu Tyr Ile His Lys His Ile Asp
  1              5              10              15
Thr Tyr Ser Gln Ser Tyr Leu Phe Asn Asp Leu Phe Tyr Pro Val Tyr
      20              25              30
Ser Gly Gly Arg Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe
      35              40              45
Gly Lys Ser Glu Asp Glu His Tyr Pro Leu Trp Xaa Val Leu Phe Gly
      50              55              60
Lys Xaa Tyr Ala Val Ala Pro Asn Ala Leu Met Phe Ile Arg Phe Met
      65              70              75              80
Xaa Asn Cys Thr Phe Val Pro Lys Leu Pro Xaa Val Met Asp Leu Lys
      85              90              95
Xaa Xaa Leu Gln Tyr Lys Ser Arg
      100              104

```

<210> 3905

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3905

```

Gln Pro Pro Pro Pro Pro Pro Pro Ser Pro Pro Pro Pro Pro
  1              5              10              15
Phe Pro Pro Ala Arg Ala Leu Ser His Leu Arg Leu His Pro Asp Ala
      20              25              30
Cys Leu Phe Pro Ser Pro Phe Pro Leu Pro Cys Ser Thr Met Pro Gly
      35              40              45
Met Met Glu Lys Gly Pro Glu Leu Leu Gly Lys Asn Arg Ser Ala Asn
      50              55              60
Gly Ser Ala Lys Ser Pro Ala Gly Gly Gly Gly Ser Gly Ala Ser Ser
      65              70              75              80
Thr Asn Gly Gly Leu His Tyr Ser Glu Pro Glu Ser Gly Cys Ser Ser
      85              90              95
Asp Asp Glu His Asp Val Gly Met Arg Val Gly Ala Glu Tyr Gln Ala
      100              105              110
Arg Ile Pro Glu Phe Asp Pro Gly Ala Thr Lys Tyr Thr Asp Lys Asp
      115              120              125
Asn Gly Gly Met Leu Val Trp Ser Pro Tyr His Ser Ile Pro Asp Ala

```


130	135	140
Lys Leu Asp Glu Tyr Ile	Ala Ile Ala Lys Glu Lys His Gly Tyr Asn	
145	150	155
Val Glu Gln Ala Leu Gly Met Leu Phe Trp His Lys His Asn Ile Glu		160
	165	170
Lys Ser Leu Ala Asp Leu Pro Asn Phe Thr Pro Phe Pro Asp Glu Trp		175
	180	185
Thr Val Glu Asp Lys Val Leu Phe Glu Gln Ala Phe Ser Phe His Gly		190
	195	200
Lys Ser Phe His Arg Ile Gln Gln Met Leu Pro Asp Lys Thr Ile Ala		205
	210	215
Ser Leu Val Lys Tyr Tyr Tyr Ser Trp Lys Lys Thr Arg Ser Arg Thr		220
225	230	235
Ser Leu Met Asp Arg Gln Ala Arg Lys Leu Ala Asn Arg His Asn Gln		240
	245	250
Gly Asp Ser Asp Asp Asp Val Glu Glu Thr His Pro Met Asp Gly Asn		255
	260	265
Asp Ser Asp Tyr Asp Pro Lys Lys Glu Ala Lys Lys Glu Gly Met Ser		270
	275	280
		285
		288

<210> 3906

<211> 170

<212> PRT

<213> Homo sapiens

<400> 3906

Lys Val Cys Asn Cys Cys Ser Gln Glu Leu Glu Thr Ser Phe Thr Tyr	
1	5
Val Asp Lys Asn Ile Asn Leu Glu Gln Arg Asn Arg Ser Ser Pro Ser	10
	20
Ala Lys Gly His Asn His Pro Gly Glu Leu Gly Trp Glu Asn Pro Asn	25
	35
Glu Trp Ser Gln Glu Ala Ala Ile Ser Leu Ile Ser Glu Glu Glu Asp	40
	50
Asp Thr Ser Ser Glu Ala Thr Ser Ser Gly Lys Ser Ile Asp Tyr Gly	55
65	70
Phe Ile Ser Ala Ile Leu Phe Leu Val Thr Gly Ile Leu Leu Val Ile	75
	85
Ile Ser Tyr Ile Val Pro Arg Glu Val Thr Val Asp Pro Asn Thr Val	90
	100
Ala Ala Arg Glu Met Glu Arg Leu Glu Lys Glu Ser Ala Arg Leu Gly	105
	115
Ala His Leu Asp Arg Cys Val Ile Ala Gly Leu Cys Leu Leu Thr Leu	120
	130
Gly Gly Val Ile Leu Ser Cys Leu Leu Met Met Ser Met Trp Lys Gly	135
145	150
Glu Leu Tyr Arg Arg Asn Arg Phe Ala Ser	155
	165
	170

<210> 3907

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3907

Ile Leu Ile Met Ser Asn Cys Leu Gln Asn Phe Leu Lys Ile Thr Ser

```

      1           5           10           15
Thr Arg Leu Leu Cys Ser Arg Leu Cys Gln Gln Leu Arg Ser Lys Arg
      20           25           30
Lys Phe Phe Gly Thr Val Pro Ile Ser Arg Leu His Arg Arg Val Val
      35           40           45
Ile Thr Gly Ile Gly Leu Val Thr Pro Leu Gly Val Gly Thr His Leu
      50           55           60
Val Trp Asp Arg Leu Ile Gly Gly Glu Ser Gly Ile Val Ser Leu Val
      65           70           75           80
Gly Glu Glu Tyr Lys Ser Ile Pro Cys Ser Val Ala Ala Tyr Val Pro
      85           90           95
Arg Gly Ser Asp Glu Gly Gln Phe Asn Glu Gln Asn Phe Val Ser Lys
      100          105          110
Ser Asp
      114

```

```

<210> 3908
<211> 223
<212> PRT
<213> Homo sapiens

```

```

      <400> 3908
Leu Gly Thr Leu Leu Gly Trp Arg Ala Pro Leu Phe Ser Arg Cys Leu
      1           5           10           15
Ala Phe His Ser Pro Phe Ile Leu Leu Asn Thr Pro Lys Leu Val Lys
      20           25           30
Thr Ala Glu Leu Pro Pro Asp Arg Asn Tyr Val Leu Gly Ala His Pro
      35           40           45
His Gly Ile Met Cys Thr Gly Phe Leu Cys Asn Phe Ser Thr Glu Ser
      50           55           60
Asn Gly Phe Ser Gln Leu Phe Pro Gly Leu Arg Pro Trp Leu Ala Val
      65           70           75           80
Leu Ala Gly Leu Phe Tyr Leu Pro Val Tyr Arg Asp Tyr Ile Met Ser
      85           90           95
Phe Gly Leu Cys Pro Val Ser Arg Gln Ser Leu Asp Phe Ile Leu Ser
      100          105          110
Gln Pro Gln Leu Gly Gln Ala Val Val Ile Met Val Gly Gly Ala His
      115          120          125
Glu Ala Leu Tyr Ser Val Pro Gly Glu His Cys Leu Thr Leu Gln Lys
      130          135          140
Arg Lys Gly Phe Val Arg Leu Ala Leu Arg His Gly Ala Ser Leu Val
      145          150          155          160
Pro Val Tyr Ser Phe Gly Glu Asn Asp Ile Phe Arg Leu Lys Ala Phe
      165          170          175
Ala Thr Gly Ser Trp Gln His Trp Cys Gln Leu Thr Phe Lys Lys Leu
      180          185          190
Met Gly Phe Ser Pro Cys Ile Phe Trp Gly Arg Gly Leu Phe Ser Ala
      195          200          205
Thr Ser Trp Gly Leu Leu Pro Phe Ala Val Pro Ile Thr Thr Val
      210          215          220          223

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<210> 3909
<211> 264
<212> PRT
<213> Homo sapiens

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      <400> 3909
Phe Arg Ala Ala Gly Arg Pro Ala Ala Ala Met Gly Asp Ile Pro Val

```

```

1           5           10           15
Val Gly Leu Ser Ser Trp Lys Ala Ser Pro Gly Lys Val Thr Glu Ala
20           25           30
Val Lys Glu Ala Ile Asp Ala Gly Tyr Arg His Phe Asp Cys Ala Tyr
35           40           45
Phe Tyr His Asn Glu Arg Glu Val Gly Ala Gly Ile Arg Cys Lys Ile
50           55           60
Lys Glu Gly Ala Val Arg Arg Glu Asp Leu Leu Ile Ala Thr Lys Leu
65           70           75           80
Trp Cys Thr Cys His Lys Lys Ser Leu Val Glu Thr Ala Cys Arg Lys
85           90           95
Ser Leu Lys Ala Leu Lys Leu Asn Tyr Leu Asp Leu Tyr Leu Ile His
100          105          110
Trp Pro Met Gly Phe Lys Pro Pro His Pro Glu Trp Ile Met Ser Cys
115          120          125
Ser Glu Leu Ser Phe Cys Leu Ser His Pro Arg Val Gln Asp Leu Pro
130          135          140
Leu Asp Glu Ser Asn Met Val Ile Pro Ser Asp Thr Asp Phe Leu Asp
145          150          155          160
Thr Trp Glu Ala Met Glu Asp Leu Val Ile Thr Gly Leu Val Lys Asn
165          170          175
Ile Gly Val Ser Asn Phe Asn His Glu Gln Leu Glu Arg Leu Leu Asn
180          185          190
Lys Pro Gly Leu Arg Phe Lys Pro Leu Thr Asn Gln Ile Glu Cys His
195          200          205
Pro Tyr Leu Thr Gln Lys Asn Leu Ile Ser Phe Cys Gln Ser Arg Asp
210          215          220
Val Ser Val Thr Ala Tyr Arg Pro Leu Gly Gly Ser Cys Glu Gly Val
225          230          235          240
Asp Leu Ile Asp Asn Pro Val Ile Lys Arg Ile Ala Lys Glu His Gly
245          250          255
Lys Ser Pro Ala Gln Ile Leu Ile
260          264

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<210> 3910
<211> 168
<212> PRT
<213> Homo sapiens

```

```

<400> 3910
Phe Phe Thr Met His Arg Lys Lys Val Asp Asn Arg Ile Arg Ile Leu
1           5           10           15
Ile Glu Asn Gly Val Ala Glu Arg Gln Arg Ser Leu Phe Val Val Val
20           25           30
Gly Asp Arg Gly Lys Asp Gln Val Ile Leu His His Met Leu Ser
35           40           45
Lys Ala Thr Val Lys Ala Arg Pro Ser Val Leu Trp Cys Tyr Lys Lys
50           55           60
Glu Leu Gly Phe Ser Ser His Arg Lys Lys Arg Met Arg Gln Leu Gln
65           70           75           80
Lys Lys Ile Lys Asn Gly Thr Leu Asn Ile Lys Gln Asp Asp Pro Phe
85           90           95
Glu Leu Phe Ile Ala Ala Thr Asn Ile Arg Tyr Cys Tyr Tyr Asn Glu
100          105          110
Thr His Lys Ile Leu Gly Asn Thr Phe Gly Met Cys Val Leu Gln Asp
115          120          125
Phe Glu Ala Leu Thr Pro Asn Leu Leu Ala Arg Thr Val Glu Thr Val
130          135          140
Glu Gly Gly Gly Leu Val Val Ile Leu Leu Arg Thr Met Asn Ser Leu
145          150          155          160
Lys Gln Leu Tyr Thr Val Thr Met

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165

168

<210> 3911
 <211> 240
 <212> PRT
 <213> Homo sapiens

<400> 3911
 Ala Gly Arg Gly Ala Arg Ala Ala Gly Glu Gly Gly Gly Pro Phe Lys
 1 5 10 15
 Ser Arg Pro Arg Pro Leu Pro Ser Ser Arg Ser Leu Pro Ala Val Gly
 20 25 30
 Gly Gly Arg Tyr Gly Ala Asp Lys Met Ala Ala Gly Gly Ala Val Ala
 35 40 45
 Ala Ala Pro Glu Cys Arg Leu Leu Pro Tyr Ala Leu His Lys Trp Ser
 50 55 60
 Ser Phe Ser Ser Thr Tyr Leu Pro Glu Asn Ile Leu Val Asp Lys Pro
 65 70 75 80
 Asn Asp Gln Ser Ser Arg Trp Ser Ser Glu Ser Asn Tyr Pro Pro Gln
 85 90 95
 Tyr Leu Ile Leu Lys Leu Glu Arg Pro Ala Ile Val Gln Asn Ile Thr
 100 105 110
 Phe Gly Lys Tyr Glu Lys Thr His Val Cys Asn Leu Lys Lys Phe Lys
 115 120 125
 Val Phe Gly Gly Met Asn Glu Glu Asn Met Thr Glu Leu Leu Ser Ser
 130 135 140
 Gly Leu Lys Asn Asp Tyr Asn Lys Glu Thr Phe Thr Leu Lys His Lys
 145 150 155 160
 Ile Asp Glu Gln Met Phe Pro Cys Arg Phe Ile Lys Ile Val Pro Leu
 165 170 175
 Leu Ser Trp Gly Pro Ser Phe Asn Phe Ser Ile Trp Tyr Val Glu Leu
 180 185 190
 Ser Gly Ile Asp Asp Pro Asp Ile Val Gln Pro Cys Leu Asn Trp Tyr
 195 200 205
 Ser Lys Tyr Arg Glu Gln Glu Ala Ile Arg Leu Cys Leu Lys His Phe
 210 215 220
 Arg Gln His Asn Tyr Thr Glu Ala Phe Glu Ser Leu Gln Lys Lys Thr
 225 230 235 240

<210> 3912
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 3912
 Phe Glu Lys Lys Gln Leu Arg Arg Pro Ser Leu Phe Leu Leu Gly Cys
 1 5 10 15
 Cys Ser Phe Gly Ile Met Ala Pro Ser Leu Trp Lys Gly Leu Glu Gly
 20 25 30
 Ile Gly Leu Phe Ala Leu Ala His Ala Ala Phe Ser Ala Ala Gln His
 35 40 45
 Arg Ser Tyr Met Arg Leu Thr Glu Lys Glu Asp Glu Ser Leu Pro Ile
 50 55 60
 Asp Ile Val Leu Gln Thr Leu Leu Ala Phe Ala Val Thr Cys Tyr Gly
 65 70 75 80
 Ile Val His Ile Ala Gly Glu Phe Lys Asp Met Asp Ala Thr Ser Glu

				85					90					95			
Leu	Lys	Asn	Lys	Thr	Phe	Asp	Thr	Val	Arg	Asn	His	Pro	Ser	Phe	Tyr		
			100					105					110				
Val	Phe	Asn	His	Arg	Gly	Ser	Glu	Tyr	Phe	Ser	Gly	Pro	Ser	Asp	Thr		
		115					120					125					
Ala	Asn	Ser	Ser	Asn	Gln	Asp	Ala	Leu	Ser	Ser	Asn	Thr	Ser	Leu	Lys		
	130					135					140						
Leu	Arg	Lys	Leu	Glu	Ser	Leu	Arg	Arg									
145					150			153									

<210> 3913
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 3913

Ala	Pro	Gly	Arg	Pro	Glu	Ala	Lys	Val	Pro	Glu	Arg	Ser	Arg	Glu	Ser		
1				5					10					15			
Gly	Ser	Arg	Arg	Val	Arg	Gly	Pro	Leu	Leu	Gln	Leu	Arg	Pro	Gly	Arg		
		20					25					30					
Thr	Ser	Arg	Pro	Ala	Ser	Gly	Arg	Gly	Arg	Gly	Gly	Ala	Gly	Gly	Ser		
	35					40					45						
Tyr	Gly	Lys	Met	Arg	Lys	Pro	Asp	Ser	Lys	Ile	Val	Leu	Leu	Gly	Asp		
	50				55					60							
Met	Asn	Val	Gly	Lys	Thr	Ser	Leu	Leu	Gln	Arg	Tyr	Met	Glu	Arg	Arg		
	65			70					75				80				
Phe	Pro	Asp	Thr	Val	Ser	Thr	Val	Gly	Gly	Ala	Phe	Tyr	Leu	Lys	Gln		
			85					90					95				
Trp	Arg	Ser	Tyr	Asn	Ile	Ser	Ile	Trp	Asp	Thr	Ala	Gly	Glu	Ala	Gly		
		100						105				110					
Ala	Ala																
	114																

<210> 3914
 <211> 2515
 <212> PRT
 <213> Homo sapiens

<400> 3914

Pro	Gly	Ile	Arg	Val	Gly	Ile	Thr	Ser	Gln	Thr	Gly	Leu	Ser	Ser	Asn		
1				5					10					15			
Leu	Gln	Glu	Asn	Cys	Ser	Lys	Leu	Ala	Phe	Ile	Ser	Ser	His	Gly	Thr		
		20					25					30					
Glu	Lys	Gln	Leu	Gln	Cys	Met	Pro	Met	Glu	Gly	Arg	Gly	Arg	Ala	Ser		
	35				40						45						
Ser	Ser	Ile	Ser	Asp	Leu	Gln	Gly	Lys	Gly	Phe	Glu	Lys	Gly	Thr	Gly		
	50			55					60								
Glu	Lys	His	Val	Pro	Gly	Val	Gly	Ser	Ala	Arg	His	Ser	Pro	Gln	Ala		
	65			70				75						80			
Ser	Ala	Gly	Gly	Ser	Pro	Trp	Gln	Arg	Gly	Lys	Ala	Gln	Thr	Arg	Trp		
			85				90						95				
Leu	Gly	Lys	Pro	Asp	Pro	Gly	Arg	Lys	Arg	Arg	Arg	Gly	Ser	Pro	Gln		
		100				105						110					
Glu	Glu	Gly	Gly	Leu	Arg	Val	Ser	Ala	Ala	Ala	Arg	Leu	Leu	Cys	Ser		
	115					120						125					
Gly	Ala	Asn	Arg	Cys	Lys	Val	Leu	Val	Arg	Gln	Asn	Ser	Thr	Pro	Asn		
	130				135						140						
Thr	Gln	Gln	Pro	Ala	Val	His	Pro	Ser	Thr	Pro	Pro	Ser	Arg	Pro	Leu		

145		150		155		160
Pro	Gln	Ala	Gly	Arg	Cys	Leu
		165		170		175
Trp	Val	Ala	Ala	Lys	Thr	Leu
		180		185		190
Pro	Trp	Arg	Leu	Ala	Ala	Pro
		195		200		205
Gly	Leu	Pro	Gly	Pro	Ser	Thr
		210		215		220
Pro	Gly	Val	Glu	Cys	Asn	Gln
		225		230		235
Pro	Val	Leu	Cys	Leu	Gly	Gln
		245		250		255
Cys	Glu	Lys	Glu	Lys	Ile	Ser
		260		265		270
Ala	Lys	Ser	Glu	Pro	Ser	Lys
		275		280		285
His	Val	Val	Asp	Glu	Asn	Lys
		290		295		300
Lys	Arg	Arg	Thr	Ser	Thr	Pro
		305		310		315
Thr	Asp	Thr	Arg	Asp	Val	Lys
		325		330		335
Thr	Glu	Glu	Pro	Gln	Lys	Gln
		340		345		350
Leu	Lys	Lys	Asp	Asp	Ser	Glu
		355		360		365
Lys	Glu	Val	Lys	Ser	Ser	Lys
		370		375		380
Ser	Glu	Asp	Lys	Leu	Ser	Val
		385		390		395
His	Lys	Thr	Gly	Asp	Glu	Thr
		405		410		415
Lys	Val	Glu	Glu	Asn	Ile	Gln
		420		425		430
Ser	Asp	Asp	Lys	Thr	Glu	Arg
		435		440		445
Leu	Ser	Val	Leu	Gly	Lys	Asp
		450		455		460
Lys	Thr	Asp	Glu	Asn	Val	Arg
		465		470		475
Leu	Ser	Ala	Glu	Lys	Thr	Lys
		485		490		495
Asp	Ser	Lys	Ile	Gln	Lys	Asp
		500		505		510
Thr	Leu	Gln	Arg	Arg	Ser	Glu
		515		520		525
Asp	Ser	Thr	Asn	Met	Asp	Ser
		530		535		540
Lys	Glu	Lys	Arg	Arg	Thr	Lys
		545		550		555
Lys	Ser	Lys	Ser	Lys	Thr	Gln
		565		570		575
Glu	Leu	Gln	Glu	Gly	Ala	Thr
		580		585		590
Lys	Glu	Lys	Asn	Thr	Glu	Glu
		595		600		605
Lys	Val	Glu	Asp	Lys	Pro	Phe
		610		615		620
Glu	Thr	Ala	Ser	Ser	Ser	Ala
		625		630		635
Arg	Ala	Lys	Leu	Pro	Leu	Ala
		645		650		655
Ser	Thr	Ser	Thr	Arg	Leu	Glu

660	665	670
Arg Ser Leu Lys His Ser Ser Lys Asp Ile Lys Lys Lys Asp Glu Asn		
675	680	685
Lys Ser Asp Asp Lys Asp Gly Lys Glu Val Asp Ser Ser His Glu Lys		
690	695	700
Ala Arg Gly Asn Ser Ser Leu Met Glu Lys Lys Leu Ser Arg Arg Leu		
705	710	715
Cys Glu Asn Arg Arg Gly Ser Leu Ser Gln Glu Met Ala Lys Gly Glu		
725	730	735
Glu Lys Leu Ala Ala Asn Thr Leu Ser Thr Pro Ser Gly Ser Ser Leu		
740	745	750
Gln Arg Pro Lys Lys Ser Gly Asp Met Thr Leu Ile Pro Glu Gln Glu		
755	760	765
Pro Met Glu Ile Asp Ser Glu Pro Gly Val Glu Asn Val Phe Glu Val		
770	775	780
Ser Lys Thr Gln Asp Asn Arg Asn Asn Asn Ser His Gln Asp Ile Asp		
785	790	795
Ser Glu Asn Met Lys Gln Lys Thr Ser Ala Thr Val Gln Lys Asp Glu		
805	810	815
Leu Arg Thr Cys Thr Ala Asp Ser Lys Ala Thr Ala Pro Ala Tyr Lys		
820	825	830
Pro Gly Arg Gly Thr Gly Val Asn Ser Asn Ser Glu Lys His Ala Asp		
835	840	845
His Arg Ser Thr Leu Thr Lys Lys Met His Ile Gln Ser Ala Val Ser		
850	855	860
Lys Met Asn Pro Gly Glu Lys Glu Pro Ile His Arg Gly Thr Thr Glu		
865	870	875
Val Asn Ile Asp Ser Glu Thr Val His Arg Met Leu Leu Ser Ala Pro		
885	890	895
Ser Glu Asn Asp Arg Val Gln Lys Asn Leu Lys Asn Thr Ala Ala Glu		
900	905	910
Glu His Val Ala Gln Gly Asp Ala Thr Leu Glu His Ser Thr Asn Leu		
915	920	925
Asp Ser Ser Pro Ser Leu Ser Ser Val Thr Val Val Pro Leu Arg Glu		
930	935	940
Ser Tyr Asp Pro Asp Val Ile Pro Leu Phe Asp Lys Arg Thr Val Leu		
945	950	955
Glu Gly Ser Thr Ala Ser Thr Ser Pro Ala Asp His Ser Ala Leu Pro		
965	970	975
Asn Gln Ser Leu Thr Val Arg Glu Ser Glu Val Leu Lys Thr Ser Asp		
980	985	990
Ser Lys Glu Gly Gly Glu Gly Phe Thr Val Asp Thr Pro Ala Lys Ala		
995	1000	1005
Ser Ile Thr Ser Lys Arg His Ile Pro Glu Ala His Gln Ala Thr Leu		
1010	1015	1020
Leu Asp Gly Lys Gln Gly Lys Val Ile Met Pro Leu Gly Ser Lys Leu		
1025	1030	1035
Thr Gly Val Ile Val Glu Asn Glu Asn Ile Thr Lys Glu Gly Gly Leu		
1045	1050	1055
Val Asp Met Ala Lys Lys Glu Asn Asp Leu Asn Ala Glu Pro Asn Leu		
1060	1065	1070
Lys Gln Thr Ile Lys Ala Thr Val Glu Asn Gly Lys Lys Asp Gly Ile		
1075	1080	1085
Ala Val Asp His Val Val Gly Leu Asn Thr Glu Lys Tyr Ala Glu Thr		
1090	1095	1100
Val Lys Leu Lys His Lys Arg Ser Pro Gly Lys Val Lys Asp Ile Ser		
1105	1110	1115
Ile Asp Val Glu Arg Arg Asn Glu Asn Ser Glu Val Asp Thr Ser Ala		
1125	1130	1135
Gly Ser Gly Ser Ala Pro Ser Val Leu His Gln Arg Asn Gly Gln Thr		
1140	1145	1150
Glu Asp Val Ala Thr Gly Pro Arg Ala Glu Lys Thr Ser Val Ala		
1155	1160	1165
Thr Ser Thr Glu Gly Lys Asp Lys Asp Val Thr Leu Ser Pro Val Lys		

1170	1175	1180
Ala Gly Pro Ala Thr Thr Thr Ser Ser Glu Thr Arg Gln Ser Glu Val		
1185	1190	1195
Ala Leu Pro Cys Thr Ser Ile Glu Ala Asp Glu Gly Leu Ile Ile Gly		1200
	1205	1210
Thr His Ser Arg Asn Asn Pro Leu His Val Gly Ala Glu Ala Ser Glu		1215
	1220	1225
Cys Thr Val Phe Ala Ala Ala Glu Glu Gly Gly Ala Val Val Thr Glu		1230
	1235	1240
Gly Phe Ala Glu Ser Glu Thr Phe Leu Thr Ser Thr Lys Glu Gly Glu		1245
	1250	1255
Ser Gly Glu Cys Ala Val Ala Glu Ser Glu Asp Arg Ala Ala Asp Leu		1260
1265	1270	1275
Leu Ala Val His Ala Val Lys Ile Glu Ala Asn Val Asn Ser Val Val		1280
	1285	1290
Thr Glu Glu Lys Asp Asp Ala Val Thr Ser Ala Gly Ser Glu Glu Lys		1295
	1300	1305
Cys Asp Gly Ser Leu Ser Arg Asp Ser Glu Ile Val Glu Gly Thr Ile		1310
	1315	1320
Thr Phe Ile Ser Glu Val Glu Ser Asp Gly Ala Val Thr Ser Ala Gly		1325
	1330	1335
Thr Glu Ile Arg Ala Gly Ser Ile Ser Ser Glu Glu Val Asp Gly Ser		1340
1345	1350	1355
Gln Gly Asn Met Met Arg Met Gly Pro Lys Lys Glu Thr Glu Gly Thr		1360
	1365	1370
Val Thr Cys Thr Gly Ala Glu Gly Arg Ser Asp Asn Phe Val Ile Cys		1375
	1380	1385
Ser Val Thr Gly Ala Gly Pro Arg Glu Glu Arg Met Val Thr Gly Ala		1390
	1395	1400
Gly Val Val Leu Gly Asp Asn Asp Ala Pro Pro Gly Thr Ser Ala Ser		1405
	1410	1415
Gln Glu Gly Asp Gly Ser Val Asn Asp Gly Thr Glu Gly Glu Ser Ala		1420
1425	1430	1435
Val Thr Ser Thr Gly Ile Thr Glu Asp Gly Glu Gly Pro Ala Ser Cys		1440
	1445	1450
Thr Gly Ser Glu Asp Ser Ser Glu Gly Phe Ala Ile Ser Ser Glu Ser		1455
	1460	1465
Glu Glu Asn Gly Glu Ser Ala Met Asp Ser Thr Val Ala Lys Glu Gly		1470
	1475	1480
Thr Asn Val Pro Leu Val Ala Ala Gly Pro Cys Asp Asp Glu Gly Ile		1485
	1490	1495
Val Thr Ser Thr Gly Ala Lys Glu Glu Asp Glu Glu Gly Glu Asp Val		1500
1505	1510	1515
Val Thr Ser Thr Gly Arg Gly Asn Glu Ile Gly His Ala Ser Thr Cys		1520
	1525	1530
Thr Gly Leu Gly Glu Glu Ser Glu Gly Val Leu Ile Cys Glu Ser Ala		1535
	1540	1545
Glu Gly Asp Ser Gln Ile Gly Thr Val Val Glu His Val Glu Ala Glu		1550
	1555	1560
Ala Gly Ala Ala Ile Met Asn Ala Asn Glu Asn Asn Val Asp Ser Met		1565
	1570	1575
Ser Gly Thr Glu Lys Gly Ser Lys Asp Thr Asp Ile Cys Ser Ser Ala		1580
1585	1590	1595
Lys Gly Ile Val Glu Ser Ser Val Thr Ser Ala Val Ser Gly Lys Asp		1600
	1605	1610
Glu Val Thr Pro Val Pro Gly Gly Cys Glu Gly Pro Met Thr Ser Ala		1615
	1620	1625
Ala Ser Asp Gln Ser Asp Ser Gln Leu Glu Lys Val Glu Asp Thr Thr		1630
	1635	1640
Ile Ser Thr Gly Leu Val Gly Gly Ser Tyr Asp Val Leu Val Ser Gly		1645
	1650	1655
Glu Val Pro Glu Cys Glu Val Ala His Thr Ser Pro Ser Glu Lys Glu		1660
1665	1670	1675
Asp Glu Asp Ile Ile Thr Ser Val Glu Asn Glu Glu Cys Asp Gly Leu		1680

5675

2195 2200 2205
 Gly Ser Glu Asp Asn Leu Lys Thr Ser Thr Thr Lys Cys Ile Thr Gly
 2210 2215 2220
 Gln Glu Ser Lys Ile Ala Pro Ser His Thr Met Ile Pro Pro Ala Thr
 2225 2230 2235 2240
 Tyr Ser Val Ala Leu Leu Ala Pro Lys Cys Glu Gln Asp Leu Thr Ile
 2245 2250 2255
 Lys Asn Asp Tyr Ser Gly Lys Trp Thr Asp Gln Ala Ser Ala Glu Lys
 2260 2265 2270
 Thr Gly Asp Asp Asn Ser Thr Arg Lys Ser Phe Pro Glu Glu Gly Asp
 2275 2280 2285
 Ile Met Val Thr Val Ser Ser Glu Glu Asn Val Cys Asp Ile Gly Asn
 2290 2295 2300
 Glu Glu Ser Pro Leu Asn Val Leu Gly Gly Leu Lys Leu Lys Ala Asn
 2305 2310 2315 2320
 Leu Lys Met Glu Ala Tyr Val Pro Ser Glu Glu Glu Lys Asn Gly Glu
 2325 2330 2335
 Ile Leu Ala Pro Pro Glu Ser Leu Cys Gly Gly Lys Pro Ser Gly Ile
 2340 2345 2350
 Ala Glu Leu Gln Arg Glu Pro Leu Leu Val Asn Glu Ser Leu Asn Val
 2355 2360 2365
 Glu Asn Ser Gly Phe Arg Thr Asn Glu Glu Ile His Ser Glu Ser Tyr
 2370 2375 2380
 Asn Lys Gly Glu Ile Ser Ser Gly Arg Lys Asp Asn Ala Glu Ala Ile
 2385 2390 2395 2400
 Ser Gly His Ser Val Glu Ala Asp Pro Lys Glu Val Glu Glu Glu Glu
 2405 2410 2415
 Arg His Met Pro Lys Arg Lys Arg Lys Gln His Tyr Leu Ser Ser Glu
 2420 2425 2430
 Asp Glu Pro Asp Asp Asn Pro Asp Val Leu Asp Ser Arg Ile Glu Thr
 2435 2440 2445
 Ala Gln Arg Gln Cys Pro Glu Thr Glu Pro His Ala Thr Lys Glu Glu
 2450 2455 2460
 Asn Ser Arg Asp Leu Glu Glu Leu Pro Lys Thr Ser Ser Glu Thr Asn
 2465 2470 2475 2480
 Ser Thr Thr Ser Arg Val Met Glu Glu Lys Asp Glu Tyr Ser Ser Ser
 2485 2490 2495
 Glu Thr Thr Gly Glu Lys Pro Glu Gln Asn Asp Asp Asp Thr Ile Lys
 2500 2505 2510
 Ser Gln Glu
 2515

<210> 3915

<211> 2515

<212> PRT

<213> Homo sapiens

<400> 3915

Pro Gly Ile Arg Val Gly Ile Thr Ser Gln Thr Gly Leu Ser Ser Asn
 1 5 10 15
 Leu Gln Glu Asn Cys Ser Lys Leu Ala Phe Ile Ser Ser His Gly Thr
 20 25 30
 Glu Lys Gln Leu Gln Cys Met Pro Met Glu Gly Arg Gly Arg Ala Ser
 35 40 45
 Ser Ser Ile Ser Asp Leu Gln Gly Lys Gly Phe Glu Lys Gly Thr Gly
 50 55 60
 Glu Lys His Val Pro Gly Val Gly Ser Ala Arg His Ser Pro Gln Ala
 65 70 75 80
 Ser Ala Gly Gly Ser Pro Trp Gln Arg Gly Lys Ala Gln Thr Arg Trp
 85 90 95
 Leu Gly Lys Pro Asp Pro Gly Arg Lys Arg Arg Arg Gly Ser Pro Gln

										100											105											110
Glu	Glu	Gly	Gly	Leu	Arg	Val	Ser	Ala	Ala	Ala	Arg	Leu	Leu	Cys	Ser																	
										115											120											125
Gly	Ala	Asn	Arg	Cys	Lys	Val	Leu	Val	Arg	Gln	Asn	Ser	Thr	Pro	Asn																	
										130											135											140
Thr	Gln	Gln	Pro	Ala	Val	His	Pro	Ser	Thr	Pro	Pro	Ser	Arg	Pro	Leu																	
										145											150											155
Pro	Gln	Ala	Gly	Arg	Cys	Leu	Val	Ala	Pro	Leu	Arg	Pro	His	Pro	Asp																	
										165											170											175
Trp	Val	Ala	Ala	Lys	Thr	Leu	Ala	Lys	Ala	Leu	Arg	Ala	Pro	Gly	Lys																	
										180											185											190
Pro	Trp	Arg	Leu	Ala	Ala	Pro	Ser	Pro	Leu	Gly	Asp	Leu	Gly	Ala	Pro																	
										195											200											205
Gly	Leu	Pro	Gly	Pro	Ser	Thr	Ala	Pro	Arg	Thr	Leu	Ser	Val	Glu	Glu																	
										210											215											220
Pro	Gly	Val	Glu	Cys	Asn	Gln	Leu	Cys	Leu	Tyr	Ala	Asp	Val	Thr	Asp																	
										225											230											235
Pro	Val	Leu	Cys	Leu	Gly	Gln	Lys	Asp	Pro	Gly	Val	Glu	Gly	Lys	His																	
										245											250											255
Cys	Glu	Lys	Glu	Lys	Ile	Ser	Ser	Ser	Lys	Glu	Leu	Lys	His	Val	His																	
										260											265											270
Ala	Lys	Ser	Glu	Pro	Ser	Lys	Pro	Ala	Arg	Arg	Leu	Ser	Glu	Ser	Leu																	
										275											280											285
His	Val	Val	Asp	Glu	Asn	Lys	Asn	Glu	Ser	Lys	Ile	Glu	Arg	Glu	His																	
										290											295											300
Lys	Arg	Arg	Thr	Ser	Thr	Pro	Val	Ile	Met	Glu	Gly	Val	Gln	Glu	Glu																	
										305											310											315
Thr	Asp	Thr	Arg	Asp	Val	Lys	Arg	Gln	Val	Glu	Arg	Ser	Glu	Ile	Cys																	
										325											330											335
Thr	Glu	Glu	Pro	Gln	Lys	Gln	Lys	Ser	Thr	Leu	Lys	Asn	Glu	Lys	His																	
										340											345											350
Leu	Lys	Lys	Asp	Asp	Ser	Glu	Thr	Pro	His	Leu	Lys	Ser	Leu	Leu	Lys																	
										355											360											365
Lys	Glu	Val	Lys	Ser	Ser	Lys	Glu	Lys	Pro	Glu	Arg	Glu	Lys	Thr	Pro																	
										370											375											380
Ser	Glu	Asp	Lys	Leu	Ser	Val	Lys	His	Lys	Tyr	Lys	Gly	Asp	Cys	Met																	
										385											390											395
His	Lys	Thr	Gly	Asp	Glu	Thr	Glu	Leu	His	Ser	Ser	Glu	Lys	Gly	Leu																	
										405											410											415
Lys	Val	Glu	Glu	Asn	Ile	Gln	Lys	Gln	Ser	Gln	Gln	Thr	Lys	Leu	Ser																	
										420											425											430
Ser	Asp	Asp	Lys	Thr	Glu	Arg	Lys	Ser	Lys	His	Arg	Asn	Glu	Arg	Lys																	
										435											440											445
Leu	Ser	Val	Leu	Gly	Lys	Asp	Gly	Lys	Pro	Val	Ser	Glu	Tyr	Ile	Ile																	
										450											455											460
Lys	Thr	Asp	Glu	Asn	Val	Arg	Lys	Glu	Asn	Asn	Lys	Lys	Glu	Arg	Arg																	
										465											470											475
Leu	Ser	Ala	Glu	Lys	Thr	Lys	Ala	Glu	His	Lys	Ser	Arg	Arg	Ser	Ser																	
										485											490											495
Asp	Ser	Lys	Ile	Gln	Lys	Asp	Ser	Leu	Gly	Ser	Lys	Gln	His	Gly	Ile																	
										500											505											510
Thr	Leu	Gln	Arg	Arg	Ser	Glu	Ser	Tyr	Ser	Glu	Asp	Lys	Cys	Asp	Met																	
										515											520											525
Asp	Ser	Thr	Asn	Met	Asp	Ser	Asn	Leu	Lys	Pro	Glu	Glu	Val	Val	His																	
										530											535											540
Lys	Glu	Lys	Arg	Arg	Thr	Lys	Ser	Leu	Leu	Glu	Glu	Lys	Leu	Val	Leu																	
										545											550											555
Lys	Ser	Lys	Ser	Lys	Thr	Gln	Gly	Lys	Gln	Val	Lys	Val	Val	Glu	Thr																	
										565											570											575
Glu	Leu	Gln	Glu	Gly	Ala	Thr	Lys	Gln	Ala	Thr	Thr	Pro	Lys	Pro	Asp																	
										580											585											590
Lys	Glu	Lys	Asn	Thr	Glu	Glu	Asn	Asp	Ser	Glu	Lys	Gln	Arg	Lys	Ser																	
										595											600											605
Lys	Val	Glu	Asp	Lys	Pro	Phe	Glu	Glu	Thr	Gly	Val	Glu	Pro	Val	Leu																	

610	615	620
Glu Thr Ala Ser Ser Ser Ala His Ser Thr Gln Lys Asp Ser Ser His		
625	630	635
Arg Ala Lys Leu Pro Leu Ala Lys Glu Lys Tyr Lys Ser Asp Lys Asp		640
	645	650
Ser Thr Ser Thr Arg Leu Glu Arg Lys Leu Ser Asp Gly His Lys Ser		655
	660	665
Arg Ser Leu Lys His Ser Ser Lys Asp Ile Lys Lys Lys Asp Glu Asn		670
	675	680
Lys Ser Asp Asp Lys Asp Gly Lys Glu Val Asp Ser Ser His Glu Lys		685
	690	695
Ala Arg Gly Asn Ser Ser Leu Met Glu Lys Lys Leu Ser Arg Arg Leu		700
705	710	715
Cys Glu Asn Arg Arg Gly Ser Leu Ser Gln Glu Met Ala Lys Gly Glu		720
	725	730
Glu Lys Leu Ala Ala Asn Thr Leu Ser Thr Pro Ser Gly Ser Ser Leu		735
	740	745
Gln Arg Pro Lys Lys Ser Gly Asp Met Thr Leu Ile Pro Glu Gln Glu		750
	755	760
Pro Met Glu Ile Asp Ser Glu Pro Gly Val Glu Asn Val Phe Glu Val		765
	770	775
Ser Lys Thr Gln Asp Asn Arg Asn Asn Asn Ser His Gln Asp Ile Asp		780
785	790	795
Ser Glu Asn Met Lys Gln Lys Thr Ser Ala Thr Val Gln Lys Asp Glu		800
	805	810
Leu Arg Thr Cys Thr Ala Asp Ser Lys Ala Thr Ala Pro Ala Tyr Lys		815
	820	825
Pro Gly Arg Gly Thr Gly Val Asn Ser Asn Ser Glu Lys His Ala Asp		830
	835	840
His Arg Ser Thr Leu Thr Lys Lys Met His Ile Gln Ser Ala Val Ser		845
	850	855
Lys Met Asn Pro Gly Glu Lys Glu Pro Ile His Arg Gly Thr Thr Glu		860
865	870	875
Val Asn Ile Asp Ser Glu Thr Val His Arg Met Leu Leu Ser Ala Pro		880
	885	890
Ser Glu Asn Asp Arg Val Gln Lys Asn Leu Lys Asn Thr Ala Ala Glu		895
	900	905
Glu His Val Ala Gln Gly Asp Ala Thr Leu Glu His Ser Thr Asn Leu		910
	915	920
Asp Ser Ser Pro Ser Leu Ser Ser Val Thr Val Val Pro Leu Arg Glu		925
	930	935
Ser Tyr Asp Pro Asp Val Ile Pro Leu Phe Asp Lys Arg Thr Val Leu		940
945	950	955
Glu Gly Ser Thr Ala Ser Thr Ser Pro Ala Asp His Ser Ala Leu Pro		960
	965	970
Asn Gln Ser Leu Thr Val Arg Glu Ser Glu Val Leu Lys Thr Ser Asp		975
	980	985
Ser Lys Glu Gly Gly Glu Gly Phe Thr Val Asp Thr Pro Ala Lys Ala		990
	995	1000
Ser Ile Thr Ser Lys Arg His Ile Pro Glu Ala His Gln Ala Thr Leu		1005
	1010	1015
Leu Asp Gly Lys Gln Gly Lys Val Ile Met Pro Leu Gly Ser Lys Leu		1020
1025	1030	1035
Thr Gly Val Ile Val Glu Asn Glu Asn Ile Thr Lys Glu Gly Gly Leu		1040
	1045	1050
Val Asp Met Ala Lys Lys Glu Asn Asp Leu Asn Ala Glu Pro Asn Leu		1055
	1060	1065
Lys Gln Thr Ile Lys Ala Thr Val Glu Asn Gly Lys Lys Asp Gly Ile		1070
	1075	1080
Ala Val Asp His Val Val Gly Leu Asn Thr Glu Lys Tyr Ala Glu Thr		1085
	1090	1095
Val Lys Leu Lys His Lys Arg Ser Pro Gly Lys Val Lys Asp Ile Ser		1100
1105	1110	1115
Ile Asp Val Glu Arg Arg Asn Glu Asn Ser Glu Val Asp Thr Ser Ala		1120

	1125		1130		1135
Gly Ser Gly	Ser Ala Pro Ser Val Leu His Gln Arg Asn Gly Gln Thr				
	1140		1145		1150
Glu Asp Val Ala Thr Gly Pro Arg Ala Glu Lys Thr Ser Val Ala					
	1155		1160		1165
Thr Ser Thr Glu Gly Lys Asp Lys Asp Val Thr Leu Ser Pro Val Lys					
	1170		1175		1180
Ala Gly Pro Ala Thr Thr Thr Ser Ser Glu Thr Arg Gln Ser Glu Val					
1185	1190		1195		1200
Ala Leu Pro Cys Thr Ser Ile Glu Ala Asp Glu Gly Leu Ile Ile Gly					
	1205		1210		1215
Thr His Ser Arg Asn Asn Pro Leu His Val Gly Ala Glu Ala Ser Glu					
	1220		1225		1230
Cys Thr Val Phe Ala Ala Ala Glu Glu Gly Gly Ala Val Val Thr Glu					
	1235		1240		1245
Gly Phe Ala Glu Ser Glu Thr Phe Leu Thr Ser Thr Lys Glu Gly Glu					
	1250		1255		1260
Ser Gly Glu Cys Ala Val Ala Glu Ser Glu Asp Arg Ala Ala Asp Leu					
1265	1270		1275		1280
Leu Ala Val His Ala Val Lys Ile Glu Ala Asn Val Asn Ser Val Val					
	1285		1290		1295
Thr Glu Glu Lys Asp Asp Ala Val Thr Ser Ala Gly Ser Glu Glu Lys					
	1300		1305		1310
Cys Asp Gly Ser Leu Ser Arg Asp Ser Glu Ile Val Glu Gly Thr Ile					
	1315		1320		1325
Thr Phe Ile Ser Glu Val Glu Ser Asp Gly Ala Val Thr Ser Ala Gly					
	1330		1335		1340
Thr Glu Ile Arg Ala Gly Ser Ile Ser Ser Glu Glu Val Asp Gly Ser					
1345	1350		1355		1360
Gln Gly Asn Met Met Arg Met Gly Pro Lys Lys Glu Thr Glu Gly Thr					
	1365		1370		1375
Val Thr Cys Thr Gly Ala Glu Gly Arg Ser Asp Asn Phe Val Ile Cys					
	1380		1385		1390
Ser Val Thr Gly Ala Gly Pro Arg Glu Glu Arg Met Val Thr Gly Ala					
	1395		1400		1405
Gly Val Val Leu Gly Asp Asn Asp Ala Pro Pro Gly Thr Ser Ala Ser					
	1410		1415		1420
Gln Glu Gly Asp Gly Ser Val Asn Asp Gly Thr Glu Gly Glu Ser Ala					
1425	1430		1435		1440
Val Thr Ser Thr Gly Ile Thr Glu Asp Gly Glu Gly Pro Ala Ser Cys					
	1445		1450		1455
Thr Gly Ser Glu Asp Ser Ser Glu Gly Phe Ala Ile Ser Ser Glu Ser					
	1460		1465		1470
Glu Glu Asn Gly Glu Ser Ala Met Asp Ser Thr Val Ala Lys Glu Gly					
	1475		1480		1485
Thr Asn Val Pro Leu Val Ala Ala Gly Pro Cys Asp Asp Glu Gly Ile					
	1490		1495		1500
Val Thr Ser Thr Gly Ala Lys Glu Glu Asp Glu Glu Gly Glu Asp Val					
1505	1510		1515		1520
Val Thr Ser Thr Gly Arg Gly Asn Glu Ile Gly His Ala Ser Thr Cys					
	1525		1530		1535
Thr Gly Leu Gly Glu Glu Ser Glu Gly Val Leu Ile Cys Glu Ser Ala					
	1540		1545		1550
Glu Gly Asp Ser Gln Ile Gly Thr Val Val Glu His Val Glu Ala Glu					
	1555		1560		1565
Ala Gly Ala Ala Ile Met Asn Ala Asn Glu Asn Asn Val Asp Ser Met					
	1570		1575		1580
Ser Gly Thr Glu Lys Gly Ser Lys Asp Thr Asp Ile Cys Ser Ser Ala					
1585	1590		1595		1600
Lys Gly Ile Val Glu Ser Ser Val Thr Ser Ala Val Ser Gly Lys Asp					
	1605		1610		1615
Glu Val Thr Pro Val Pro Gly Gly Cys Glu Gly Pro Met Thr Ser Ala					
	1620		1625		1630
Ala Ser Asp Gln Ser Asp Ser Gln Leu Glu Lys Val Glu Asp Thr Thr					

1635	1640	1645
Ile Ser Thr Gly Leu Val Gly Gly Ser Tyr Asp Val Leu Val Ser Gly		
1650	1655	1660
Glu Val Pro Glu Cys Glu Val Ala His Thr Ser Pro Ser Glu Lys Glu		
1665	1670	1675
Asp Glu Asp Ile Ile Thr Ser Val Glu Asn Glu Glu Cys Asp Gly Leu		1680
1685	1690	1695
Met Ala Thr Thr Ala Ser Gly Asp Ile Thr Asn Gln Asn Ser Leu Ala		
1700	1705	1710
Gly Gly Lys Asn Gln Gly Lys Val Leu Ile Ile Ser Thr Ser Thr Thr		
1715	1720	1725
Asn Asp Tyr Thr Pro Gln Val Ser Ala Ile Thr Asp Val Glu Gly Gly		
1730	1735	1740
Leu Ser Asp Ala Leu Arg Thr Glu Glu Asn Met Glu Gly Thr Arg Val		
1745	1750	1755
Thr Thr Glu Glu Phe Glu Ala Pro Met Pro Ser Ala Val Ser Gly Asp		1760
1765	1770	1775
Asp Ser Gln Leu Thr Ala Ser Arg Ser Glu Glu Lys Asp Glu Cys Ala		
1780	1785	1790
Met Ile Ser Thr Ser Ile Gly Glu Glu Phe Glu Leu Pro Ile Ser Ser		
1795	1800	1805
Ala Thr Thr Ile Lys Cys Ala Glu Ser Leu Gln Pro Val Ala Ala Ala		
1810	1815	1820
Val Glu Glu Arg Ala Thr Gly Pro Val Leu Ile Ser Thr Ala Asp Phe		
1825	1830	1835
Glu Gly Pro Met Pro Ser Ala Pro Pro Glu Ala Glu Ser Pro Leu Ala		1840
1845	1850	1855
Ser Thr Ser Lys Glu Glu Lys Asp Glu Cys Ala Leu Ile Ser Thr Ser		
1860	1865	1870
Ile Ala Glu Glu Cys Glu Ala Ser Val Ser Gly Val Val Val Glu Ser		
1875	1880	1885
Glu Asn Glu Arg Ala Gly Thr Val Met Glu Glu Lys Asp Gly Ser Gly		
1890	1895	1900
Ile Ile Ser Thr Ser Ser Val Glu Asp Cys Glu Gly Pro Val Ser Ser		
1905	1910	1915
Ala Val Pro Gln Glu Glu Gly Asp Pro Ser Val Thr Pro Ala Glu Glu		1920
1925	1930	1935
Met Gly Asp Thr Ala Met Ile Ser Thr Ser Thr Ser Glu Gly Cys Glu		
1940	1945	1950
Ala Val Met Ile Gly Ala Val Leu Gln Asp Glu Asp Arg Leu Thr Ile		
1955	1960	1965
Thr Arg Val Glu Asp Leu Ser Asp Ala Ala Ile Ile Ser Thr Ser Thr		
1970	1975	1980
Ala Glu Cys Met Pro Ile Ser Ala Ser Ile Asp Arg His Glu Glu Asn		
1985	1990	1995
Gln Leu Thr Ala Asp Asn Pro Glu Gly Asn Gly Asp Leu Ser Ala Thr		2000
2005	2010	2015
Glu Val Ser Lys His Lys Val Pro Met Pro Ser Leu Ile Ala Glu Asn		
2020	2025	2030
Asn Cys Arg Cys Pro Gly Pro Val Arg Gly Gly Lys Glu Pro Gly Pro		
2035	2040	2045
Val Leu Ala Val Ser Thr Glu Glu Gly His Asn Gly Pro Ser Val His		
2050	2055	2060
Lys Pro Ser Ala Gly Gln Gly His Pro Ser Ala Val Cys Ala Glu Lys		
2065	2070	2075
Glu Glu Lys His Gly Lys Glu Cys Pro Glu Ile Gly Pro Phe Ala Gly		2080
2085	2090	2095
Arg Gly Gln Lys Glu Ser Thr Leu His Leu Ile Asn Ala Glu Glu Lys		
2100	2105	2110
Asn Val Leu Leu Asn Ser Leu Gln Lys Glu Asp Lys Ser Pro Glu Thr		
2115	2120	2125
Gly Thr Ala Gly Gly Ser Ser Thr Ala Ser Tyr Ser Ala Gly Arg Gly		
2130	2135	2140
Leu Glu Gly Asn Ala Asn Ser Pro Ala His Leu Arg Gly Pro Glu Gln		

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<210> 3916
<211> 257
<212> PRT
<213> Homo sapiens
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<400> 3916

Gly	Pro	Phe	Gly	Val	Leu	Trp	Pro	Ser	Ala	Lys	Pro	Gly	Pro	Val	Thr
1				5					10					15	
Ala	Val	Glu	Ala	Arg	Pro	Pro	Asp	Ala	Ser	Asp	Pro	Glu	Gly	Leu	Arg
			20					25					30		
Gly	Gly	Ser	Pro	Ala	Pro	Leu	Leu	Ala	Pro	Gly	Pro	Leu	Asp	Pro	Ser
		35					40					45			
Gly	Arg	Leu	His	Pro	Ala	Val	Ser	Met	Met	Ser	Tyr	Leu	Lys	Gln	Pro

50	55	60
Pro Tyr Gly Met Asn Gly	Leu Gly Leu Ala Gly	Pro Ala Met Asp Leu
65	70	75
Leu His Pro Ser Val Gly Tyr	Pro Ala Thr Pro Arg Lys	Gln Arg Arg
85	90	95
Glu Arg Thr Thr Phe Thr Arg	Ser Gln Leu Asp Val Leu	Glu Ala Leu
100	105	110
Phe Ala Lys Thr Arg Tyr Pro	Asp Ile Phe Met Arg Glu	Glu Val Ala
115	120	125
Leu Lys Ile Asn Leu Pro Glu	Ser Arg Val Gln Val Trp	Phe Lys Asn
130	135	140
Arg Arg Ala Lys Cys Arg Gln	Gln Gln Ser Gly Ser Gly	Thr Lys
145	150	155
Ser Arg Pro Ala Lys Lys Lys	Ser Ser Pro Val Arg Glu	Ser Ser Gly
165	170	175
Ser Glu Ser Ser Gly Gln Phe	Thr Pro Pro Ala Val Ser	Ser Ser Ala
180	185	190
Ser Ser Ser Ser Ala Ser Ser	Ser Ser Ala Asn Pro Ala	Ala Ala
195	200	205
Ala Ala Ala Gly Leu Val Val	Ala Lys Leu Pro Cys Pro	Leu His Ile
210	215	220
Phe Ser Leu Cys Val Phe Ile	Glu Glu Asn Arg Leu Val	Ser Gly Ser
225	230	235
Trp Ala Arg Asp Ile Arg Ser	Val Glu Glu Thr Asp Lys	Ser Gly Tyr
245	250	255
Arg		
257		

<210> 3917
 <211> 258
 <212> PRT
 <213> Homo sapiens

<400> 3917

Arg Asn Ile Pro Gly Arg Arg	Phe Arg Pro Pro Gly Leu Arg	Arg Arg Leu
1	5	10
Leu Lys Gly Pro His Met Pro	Arg Glu Pro Arg Gly Tyr Arg	Thr Arg
20	25	30
Val Pro Ala Leu Arg Glu Leu	Val Pro Ser Ser His Ala Gly	Ser Gly
35	40	45
Ala Ser Glu His Cys Gln Asn	Asn Arg Gln Gly Ser Arg	Gln His Arg
50	55	60
Ala Ser Arg Asn Val Gln Ala	Gly Gly Ala Leu Ala Pro	Pro Arg His
65	70	75
Leu Cys Gly Leu Cys Ser Arg	Leu His Phe Leu Lys Pro	Asp Leu Ser
85	90	95
Val Arg Ala Ala Pro Ser Arg	Ala Gly Ala Ser Val Met	Ala Leu Arg
100	105	110
Lys Glu Leu Leu Lys Ser Ile	Trp Tyr Ala Phe Thr Ala	Leu Asp Val
115	120	125
Glu Lys Ser Gly Lys Val Ser	Lys Ser Gln Leu Arg Val	Leu Ser His
130	135	140
Asn Leu Tyr Thr Val Leu His	Ile Pro His Asp Pro Val	Ala Leu Glu
145	150	155
Glu His Phe Arg Asp Asp Asp	Asp Gly Pro Val Ser Ser	Gln Gly Tyr
165	170	175
Met Pro Tyr Leu Asn Lys Tyr	Ile Leu Asp Lys Val Glu	Glu Gly Ala
180	185	190
Phe Val Lys Glu His Phe Asp	Glu Leu Cys Trp Thr Leu	Thr Ala Lys
195	200	205
Lys Asn Tyr Arg Ala Asp Ser	Asn Gly Asn Ser Met Leu	Ser Asn Gln

210 215 220
 Asp Ala Phe Arg Leu Trp Cys Leu Phe Asn Phe Leu Ser Glu Asp Lys
 225 230 235 240
 Tyr Pro Leu Ile Met Asp Pro Asp Glu Gly Glu Tyr Leu Leu Lys Arg
 245 250 255
 Tyr Ser
 258

<210> 3918
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 3918
 Trp Gln Asp Leu Val Cys Leu Gly Gly Ser Arg Ala Gln Glu Gln Lys
 1 5 10 15
 Pro Leu Gln Gln Leu Trp Asn Ala Ile Leu Leu Val Ala Met Leu Leu
 20 25 30
 Cys Thr Gly Leu Val Val Gln Ala Gln Arg Gln Ala Ser Arg Gln Ser
 35 40 45
 Gln Arg Glu Leu Gly Gly Gln Val Asp Leu Phe Lys Arg Arg Val Val
 50 55 60
 Arg Arg Leu Ala Ser Leu Lys Thr Arg Arg Cys Arg Leu Ser Arg Ala
 65 70 75 80
 Ala Gln Gly Leu Pro Asp Pro Gly Ala Glu Thr Cys Ala Val Cys Leu
 85 90 95
 Asp Tyr Phe Cys Asn Lys Gln
 100 103

<210> 3919
 <211> 68
 <212> PRT
 <213> Homo sapiens

<400> 3919
 Arg Val Leu Thr Ala Ile Asn His Thr Leu Lys Glu Asn Leu Arg Lys
 1 5 10 15
 Phe Tyr Lys Gly Lys Lys Asp Lys Pro Leu Asp Leu Arg Pro Lys Lys
 20 25 30
 Thr Arg Ala Met Arg Arg Arg Leu Asn Met His Glu Glu Asn Leu Lys
 35 40 45
 Thr Lys Lys Gln His Arg Lys Glu Arg Leu Tyr Pro Leu Arg Lys Tyr
 50 55 60
 Ala Ala Lys Ala
 65 68

<210> 3920
 <211> 218
 <212> PRT
 <213> Homo sapiens

<400> 3920
 Arg Cys Cys Arg Ser Phe Val Ala Pro Leu Gln Glu Lys Val Val Phe
 1 5 10 15
 Gly Leu Phe Phe Leu Gly Ala Ile Leu Cys Leu Ser Phe Ser Trp Leu

			20						25					30			
Phe	His	Thr	Val	Tyr	Cys	His	Ser	Glu	Gly	Val	Ser	Arg	Leu	Phe	Ser		
			35						40					45			
Lys	Leu	Asp	Tyr	Ser	Gly	Ile	Ala	Leu	Leu	Ile	Met	Gly	Ser	Phe	Val		
		50				55					60						
Pro	Trp	Leu	Tyr	Tyr	Ser	Phe	Tyr	Cys	Asn	Pro	Gln	Pro	Cys	Phe	Ile		
		65				70					75				80		
Tyr	Leu	Ile	Val	Ile	Cys	Val	Leu	Gly	Ile	Ala	Ala	Ile	Ile	Val	Ser		
				85						90					95		
Gln	Trp	Asp	Met	Phe	Ala	Thr	Pro	Gln	Tyr	Arg	Gly	Val	Arg	Ala	Gly		
			100					105						110			
Val	Phe	Leu	Gly	Leu	Gly	Leu	Ser	Gly	Ile	Ile	Pro	Thr	Leu	His	Tyr		
		115						120						125			
Val	Ile	Ser	Glu	Gly	Phe	Leu	Lys	Ala	Ala	Thr	Ile	Gly	Gln	Ile	Gly		
		130				135					140						
Trp	Leu	Met	Leu	Met	Ala	Ser	Leu	Tyr	Ile	Thr	Gly	Ala	Ala	Leu	Tyr		
		145				150					155				160		
Ala	Ala	Arg	Ile	Pro	Glu	Arg	Phe	Phe	Pro	Gly	Lys	Cys	Asp	Ile	Trp		
				165					170					175			
Phe	His	Ser	His	Gln	Leu	Phe	His	Ile	Phe	Val	Val	Ala	Gly	Ala	Phe		
			180					185						190			
Val	His	Phe	His	Gly	Val	Ser	Asn	Leu	Gln	Glu	Phe	Arg	Phe	Met	Ile		
		195					200					205					
Gly	Gly	Gly	Cys	Ser	Glu	Glu	Asp	Ala	Leu								
		210					215		218								

<210> 3921

<211> 378

<212> PRT

<213> Homo sapiens

<400> 3921

Leu	Glu	Arg	Asp	Gly	Cys	Gly	Gly	Glu	Glu	Gly	Gly	Ser	Val	Arg	Ser		
	1			5					10					15			
Gly	Ala	Gly	Pro	Asp	Ser	Asp	Pro	Arg	Gly	Ala	Ser	Ser	Pro	Pro	Ala		
			20					25					30				
Gly	His	Arg	Gly	Thr	Ala	Ala	Ser	Pro	Arg	Pro	Val	Ala	Ala	Pro	Ser		
		35					40						45				
Arg	Thr	Pro	Ala	Pro	Pro	His	Thr	Arg	Ala	Arg	Ala	Ser	Pro	Gly	Leu		
	50					55					60						
Pro	Ser	Gly	Pro	Ala	Trp	Arg	Arg	Val	Gln	Trp	Phe	Ser	Arg	Val	Ser		
	65				70					75				80			
Gly	Gln	Val	Ser	Thr	Leu	Met	Lys	Ala	Thr	Val	Leu	Met	Arg	Gln	Pro		
				85					90					95			
Gly	Arg	Val	Gln	Glu	Ile	Val	Gly	Ala	Leu	Arg	Lys	Gly	Gly	Gly	Asp		
			100					105						110			
Arg	Leu	Gln	Val	Ile	Ser	Asp	Phe	Asp	Met	Thr	Leu	Ser	Arg	Phe	Ala		
		115					120						125				
Tyr	Asn	Gly	Lys	Arg	Cys	Pro	Ser	Ser	Tyr	Asn	Ile	Leu	Asp	Asn	Ser		
	130					135					140						
Lys	Ile	Ile	Ser	Glu	Glu	Cys	Arg	Lys	Glu	Leu	Thr	Ala	Leu	Leu	His		
	145				150				155						160		
His	Tyr	Tyr	Pro	Ile	Glu	Ile	Asp	Pro	His	Arg	Thr	Val	Lys	Glu	Lys		
			165						170					175			
Leu	Pro	His	Met	Val	Glu	Trp	Trp	Thr	Lys	Ala	His	Asn	Leu	Leu	Cys		
			180					185					190				
Gln	Gln	Lys	Ile	Gln	Lys	Phe	Gln	Ile	Ala	Gln	Val	Val	Arg	Glu	Ser		
		195				200						205					
Asn	Ala	Met	Leu	Arg	Glu	Gly	Tyr	Lys	Thr	Phe	Phe	Asn	Thr	Leu	Tyr		
	210					215						220					
His	Asn	Asn	Ile	Pro	Leu	Phe	Ile	Phe	Ser	Ala	Gly	Ile	Gly	Asp	Ile		

225 230 235 240
 Leu Glu Glu Ile Ile Arg Gln Met Lys Val Phe His Pro Asn Ile His
 245 250 255
 Ile Val Ser Asn Tyr Met Asp Phe Asn Glu Asp Gly Phe Leu Gln Gly
 260 265 270
 Phe Lys Gly Gln Leu Ile His Thr Tyr Asn Lys Asn Ser Ser Ala Cys
 275 280 285
 Glu Asn Cys Gly Tyr Phe Gln Gln Leu Glu Gly Lys Thr Asn Val Ile
 290 295 300
 Leu Leu Gly Asp Ser Ile Gly Asp Leu Thr Met Ala Asp Gly Val Pro
 305 310 315 320
 Gly Val Gln Asn Ile Leu Lys Ile Gly Phe Leu Asn Asp Lys Val Glu
 325 330 335
 Glu Arg Arg Glu Arg Tyr Met Asp Ser Tyr Asp Ile Val Leu Glu Lys
 340 345 350
 Asp Glu Thr Leu Asp Val Val Asn Gly Leu Leu Gln His Ile Leu Cys
 355 360 365
 Gln Gly Val Gln Leu Glu Met Gln Gly Pro
 370 375 378

<210> 3922
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 3922
 Gly Lys Ile Tyr Gln Arg Ala Phe Gly Gly His Ser Leu Lys Phe Gly
 1 5 10 15
 Lys Gly Val Gln Ala His Gly Cys Cys Cys Val Ala Asp Arg Thr Gly
 20 25 30
 His Ser Ile Leu His Thr Ser Tyr Gly Arg Glu Arg Pro Ala Pro Val
 35 40 45
 His Leu Arg Gln Asp Thr
 50 54

<210> 3923
 <211> 1085
 <212> PRT
 <213> Homo sapiens

<400> 3923
 Glu His Ala Thr His Ala Tyr Ala Lys Leu Gly Thr Arg Arg Arg His
 1 5 10 15
 Arg Glu Val Thr Val Phe Val Pro Thr Trp Gln Leu Lys Lys Asn Arg
 20 25 30
 Arg Val Arg Glu Ser His Phe Leu Thr Lys Leu His Ser Leu Lys Met
 35 40 45
 Leu Ser Ile Thr Pro Ser Gln Leu Glu Asn Gly Lys Lys Ile Thr Thr
 50 55 60
 Tyr Asp Tyr Arg Phe Met Val Lys Leu Ala Glu Glu Thr Asp Gly Ile
 65 70 75 80
 Ile Val Thr Asn Glu Gln Ile His Ile Leu Met Asn Ser Ser Lys Lys
 85 90 95
 Leu Met Val Lys Asp Arg Leu Leu Pro Phe Thr Phe Ala Gly Asn Leu
 100 105 110
 Phe Met Val Pro Asp Asp Pro Leu Gly Arg Asp Gly Pro Thr Leu Asp
 115 120 125
 Glu Phe Leu Lys Lys Pro Asn Arg Leu Asp Thr Asp Ile Gly Asn Phe

130	135	140
Leu Lys Val Trp Lys Thr	Leu Pro Pro Ser Ser	Ala Ser Val Thr Glu
145	150	155
Leu Ser Asp Asp Ala Asp	Ser Gly Pro Leu Glu Ser	Leu Pro Asn Met
165	170	175
Glu Glu Val Arg Glu Glu	Lys Glu Arg Gln Asp Glu	Glu Gln Arg
180	185	190
Gln Gly Gln Gly Thr Gln	Lys Ala Ala Glu Glu Asp	Asp Leu Asp Ser
195	200	205
Ser Leu Ala Ser Val Phe	Arg Val Glu Cys Pro Ser	Leu Ser Glu Glu
210	215	220
Ile Leu Arg Cys Leu Ser	Leu His Asp Pro Pro	Asp Gly Ala Leu Asp
225	230	235
Ile Asp Leu Leu Pro Gly	Ala Ala Ser Pro Tyr	Leu Gly Ile Pro Trp
245	250	255
Asp Gly Lys Ala Pro Cys	Gln Gln Val Leu Ala His	Leu Ala Gln Leu
260	265	270
Thr Ile Pro Ser Asn Phe	Thr Ala Leu Ser Phe	Phe Met Gly Phe Met
275	280	285
Asp Ser His Arg Asp Ala	Ile Pro Asp Tyr Glu	Ala Leu Val Gly Pro
290	295	300
Leu His Ser Leu Leu Lys	Gln Lys Pro Asp Trp	Gln Trp Asp Gln Glu
305	310	315
His Glu Glu Ala Phe Leu	Ala Leu Lys Arg Ala	Leu Val Ser Ala Leu
325	330	335
Cys Leu Met Ala Pro Asn	Ser Gln Leu Pro Phe	Arg Leu Glu Val Thr
340	345	350
Val Ser His Val Ala Leu	Thr Ala Ile Leu His	Gln Glu His Ser Gly
355	360	365
Arg Lys His Pro Ile Ala	Tyr Thr Ser Lys Pro	Leu Leu Pro Asp Glu
370	375	380
Glu Ser Gln Gly Pro Gln	Ser Gly Gly Asp Ser	Pro Tyr Ala Val Ala
385	390	395
Trp Ala Leu Lys His Phe	Ser Arg Cys Ile Gly	Asp Thr Pro Val Val
405	410	415
Leu Asp Leu Ser Tyr Ala	Ser Arg Thr Thr Ala	Asp Pro Glu Val Arg
420	425	430
Glu Gly Arg Arg Val Ser	Lys Ala Trp Leu Ile	Arg Trp Ser Leu Leu
435	440	445
Val Gln Asp Lys Gly Lys	Arg Ala Leu Glu Leu	Ala Leu Leu Gln Gly
450	455	460
Leu Leu Gly Glu Asn Arg	Leu Leu Thr Pro Ala	Ala Ser Met Pro Arg
465	470	475
Phe Phe Gln Val Leu Pro	Pro Phe Ser Asp Leu	Ser Thr Phe Val Cys
485	490	495
Ile His Met Ser Gly Tyr	Cys Phe Tyr Arg Glu	Asp Glu Trp Cys Ala
500	505	510
Gly Phe Gly Leu Tyr Val	Leu Ser Pro Thr Ser	Pro Pro Val Ser Leu
515	520	525
Ser Phe Ser Cys Ser Pro	Tyr Thr Pro Thr Tyr	Ala His Leu Ala Ala
530	535	540
Val Ala Cys Gly Leu Glu	Arg Phe Gly Gln Ser	Pro Leu Pro Val Val
545	550	555
Phe Leu Thr His Cys Asn	Trp Ile Phe Ser Leu	Leu Trp Glu Leu Leu
565	570	575
Pro Leu Trp Arg Ala Arg	Gly Phe Leu Ser Ser	Asp Gly Ala Pro Leu
580	585	590
Pro His Pro Ser Leu Leu	Ser Tyr Ile Ile Ser	Leu Thr Ser Gly Leu
595	600	605
Ser Ser Leu Pro Phe Ile	Tyr Arg Thr Ser Tyr	Arg Gly Ser Leu Phe
610	615	620
Ala Val Thr Val Asp Thr	Leu Ala Lys Gln Gly	Ala Gln Gly Gly Gly
625	630	635
Gln Trp Trp Ser Leu Pro	Lys Asp Val Pro Ala	Pro Thr Val Ser Pro

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        645                650                655
His Ala Met Gly Lys Arg Pro Asn Leu Leu Ala Leu Gln Leu Ser Asp
        660                665                670
Ser Thr Leu Ala Asp Ile Ile Ala Arg Leu Gln Ala Gly Gln Lys Leu
        675                680                685
Ser Gly Ser Ser Pro Phe Ser Ser Ala Phe Asn Ser Leu Ser Leu Asp
        690                695                700
Lys Glu Ser Gly Leu Leu Met Phe Lys Gly Asp Lys Lys Pro Arg Val
705                710                715                720
Trp Val Val Pro Thr Gln Leu Arg Arg Asp Leu Ile Phe Ser Val His
        725                730                735
Asp Ile Pro Leu Gly Ala His Gln Arg Pro Glu Glu Thr Tyr Lys Lys
        740                745                750
Leu Arg Leu Leu Gly Trp Trp Pro Gly Met Gln Glu His Val Lys Asp
        755                760                765
Tyr Cys Arg Ser Cys Leu Phe Cys Ile Pro Arg Asn Leu Ile Gly Ser
        770                775                780
Glu Leu Lys Val Ile Glu Ser Pro Trp Pro Leu Arg Ser Thr Ala Pro
785                790                795                800
Trp Ser Asn Leu Gln Ile Glu Val Val Gly Pro Val Thr Ile Ser Glu
        805                810                815
Glu Gly His Lys His Val Leu Ile Val Ala Asp Pro Asn Thr Arg Trp
        820                825                830
Val Glu Ala Phe Pro Leu Lys Pro Tyr Thr His Thr Ala Val Ala Gln
        835                840                845
Val Leu Leu Gln His Val Phe Ala Arg Trp Gly Val Pro Val Arg Leu
        850                855                860
Glu Ala Ala Gln Gly Pro Gln Phe Ala Arg His Val Leu Val Ser Cys
865                870                875                880
Gly Leu Ala Leu Gly Ala Gln Val Ala Ser Leu Ser Arg Asp Leu Gln
        885                890                895
Phe Pro Cys Leu Thr Ser Ser Gly Ala Tyr Trp Glu Phe Lys Arg Ala
        900                905                910
Leu Lys Glu Phe Ile Phe Leu His Gly Lys Lys Trp Ala Ala Ser Leu
        915                920                925
Pro Leu Leu His Leu Ala Phe Arg Ala Ser Ser Thr Asp Ala Thr Pro
        930                935                940
Phe Lys Val Leu Thr Gly Gly Glu Ser Arg Leu Thr Glu Pro Leu Trp
945                950                955                960
Trp Glu Met Ser Ser Ala Asn Ile Glu Gly Leu Lys Met Asp Val Phe
        965                970                975
Leu Leu Gln Leu Val Gly Glu Leu Leu Glu Leu His Trp Arg Val Ala
        980                985                990
Asp Lys Ala Ser Glu Lys Ala Glu Asn Arg Arg Phe Lys Arg Glu Ser
        995                1000                1005
Gln Glu Lys Glu Trp Asn Val Gly Asp Gln Val Leu Leu Leu Ser Leu
1010                1015                1020
Pro Arg Asn Gly Ser Ser Ala Lys Trp Val Gly Pro Phe Tyr Ile Gly
1025                1030                1035                1040
Asp Arg Leu Ser Leu Ser Leu Tyr Arg Ile Trp Gly Phe Pro Thr Pro
        1045                1050                1055
Glu Lys Leu Gly Cys Ile Tyr Pro Ser Ser Leu Met Lys Ala Phe Ala
        1060                1065                1070
Lys Ser Gly Thr Pro Leu Ser Phe Lys Val Leu Glu Gln
        1075                1080                1085

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<210> 3924

<211> 608

<212> PRT

<213> Homo sapiens

<400> 3924

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Met Gly Ser Val Thr Val Arg Tyr Phe Cys Tyr Gly Cys Leu Phe Thr
 1          5          10          15
Ser Ala Thr Trp Thr Val Leu Leu Phe Val Tyr Phe Asn Phe Ser Glu
          20          25          30
Val Thr Gln Pro Leu Lys Asn Val Pro Val Lys Gly Ser Gly Pro His
          35          40          45
Gly Pro Ser Pro Lys Lys Phe Tyr Pro Arg Phe Thr Arg Gly Pro Ser
          50          55          60
Arg Val Leu Glu Pro Gln Phe Lys Ala Asn Lys Ile Asp Asp Val Ile
          65          70          75          80
Asp Ser Arg Val Glu Asp Pro Glu Glu Gly His Leu Lys Phe Ser Ser
          85          90          95
Glu Leu Gly Met Ile Phe Asn Glu Arg Asp Gln Glu Leu Arg Asp Leu
          100          105          110
Gly Tyr Gln Lys His Ala Phe Asn Met Leu Ile Ser Asp Arg Leu Gly
          115          120          125
Tyr His Arg Asp Val Pro Asp Thr Arg Asn Ala Ala Cys Lys Glu Lys
          130          135          140
Phe Tyr Pro Pro Asp Leu Pro Ala Ala Ser Val Val Ile Cys Phe Tyr
          145          150          155          160
Asn Glu Ala Phe Ser Ala Leu Leu Arg Thr Val His Ser Val Ile Asp
          165          170          175
Arg Thr Pro Ala His Leu Leu His Glu Ile Ile Leu Val Asp Asp Asp
          180          185          190
Ser Asp Phe Asp Asp Leu Lys Gly Glu Leu Asp Glu Tyr Val Gln Lys
          195          200          205
Tyr Leu Pro Gly Lys Ile Lys Val Ile Arg Asn Thr Lys Arg Glu Gly
          210          215          220
Leu Ile Arg Gly Arg Met Ile Gly Ala Ala His Ala Thr Gly Glu Val
          225          230          235          240
Leu Val Phe Leu Asp Ser His Cys Glu Val Asn Val Met Trp Leu Gln
          245          250          255
Pro Leu Leu Ala Ile Arg Glu Asp Arg His Thr Val Gly Cys Pro
          260          265          270
Val Ile Asp Ile Ile Ser Ala Asp Thr Leu Ala Tyr Ser Ser Ser Pro
          275          280          285
Val Val Arg Gly Gly Phe Asn Trp Gly Leu His Phe Lys Trp Asp Leu
          290          295          300
Val Pro Leu Ser Glu Leu Gly Arg Ala Glu Gly Ala Thr Ala Pro Ile
          305          310          315          320
Lys Ser Pro Thr Met Ala Gly Gly Leu Phe Ala Met Asn Arg Gln Tyr
          325          330          335
Phe His Glu Leu Gly Gln Tyr Asp Ser Gly Met Asp Ile Trp Gly Gly
          340          345          350
Glu Asn Leu Glu Ile Ser Phe Arg Ile Trp Met Cys Gly Gly Lys Leu
          355          360          365
Phe Ile Ile Pro Cys Ser Arg Val Gly His Ile Phe Arg Lys Arg Arg
          370          375          380
Pro Tyr Gly Ser Pro Glu Gly Gln Asp Thr Met Thr His Asn Ser Leu
          385          390          395          400
Arg Leu Ala His Val Trp Leu Asp Glu Tyr Lys Glu Gln Tyr Phe Ser
          405          410          415
Leu Arg Pro Asp Leu Lys Thr Lys Ser Tyr Gly Asn Ile Ser Glu Arg
          420          425          430
Val Glu Leu Arg Lys Lys Leu Gly Cys Lys Ser Phe Lys Trp Tyr Leu
          435          440          445
Asp Asn Val Tyr Pro Glu Met Gln Ile Ser Gly Ser His Ala Lys Pro
          450          455          460
Gln Gln Pro Ile Phe Val Asn Arg Gly Pro Lys Arg Pro Lys Val Leu
          465          470          475          480
Gln Arg Gly Arg Leu Tyr His Leu Gln Thr Asn Lys Cys Leu Val Ala
          485          490          495
Gln Gly Arg Pro Ser Gln Lys Gly Gly Leu Val Val Leu Lys Ala Cys

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500	505	510
Asp Tyr Ser Asp Pro Asn Gln Ile Trp Ile Tyr Asn Glu Glu His Glu		
515	520	525
Leu Val Leu Asn Ser Leu Leu Cys Leu Asp Met Ser Glu Thr Arg Ser		
530	535	540
Ser Asp Pro Pro Arg Leu Met Lys Cys His Gly Ser Gly Gly Ser Gln		
545	550	555
Gln Trp Thr Phe Gly Lys Asn Asn Arg Leu Tyr Gln Val Ser Val Gly		
565	570	575
Gln Cys Leu Arg Ala Val Asp Pro Leu Gly Gln Lys Gly Ser Val Ala		
580	585	590
Met Ala Ile Cys Asp Gly Ser Ser Ser Gln Gln Trp His Leu Glu Gly		
595	600	605
		608

<210> 3925

<211> 829

<212> PRT

<213> Homo sapiens

<400> 3925

Val Arg Trp Asn Ser Lys Thr Glu Cys Tyr Leu Ser Ile Gln Thr Gln		
1	5	10
Glu Asn Phe Pro Ala Asn Leu Asn Glu Leu Val Asn Cys Ile Val Ile		
20	25	30
Ser Ser Leu Val Thr Thr Gln Arg Lys Leu Lys Ala Met Ser Leu Leu		
35	40	45
Gly Ser Arg Asn Gln Leu Ala Arg Ala Val Leu Asn Pro Asn Pro Met		
50	55	60
Asp Phe Cys Thr Lys Asp Leu Leu Thr Thr Thr Ser Glu Arg Ile Ile		
65	70	75
Ala Tyr Leu Arg Asp Phe Asn Glu Asp Gln Lys Lys Ala Ile Glu Thr		
85	90	95
Ala Tyr Ala Met Val Lys His Ser Pro Ser Val Ala Lys Ile Cys Leu		
100	105	110
Ile His Gly Pro Pro Gly Thr Gly Lys Ser Lys Thr Ile Val Gly Leu		
115	120	125
Leu Tyr Arg Leu Leu Thr Glu Asn Gln Arg Lys Gly His Ser Asp Glu		
130	135	140
Asn Ser Asn Ala Lys Ile Lys Gln Asn Arg Val Leu Val Cys Ala Pro		
145	150	155
Ser Asn Ala Ala Val Asp Glu Leu Met Lys Lys Ile Ile Leu Glu Phe		
165	170	175
Lys Glu Lys Cys Lys Asp Lys Lys Asn Pro Leu Gly Asn Cys Gly Asp		
180	185	190
Ile Asn Leu Val Arg Leu Gly Pro Glu Lys Ser Ile Asn Ser Glu Val		
195	200	205
Leu Lys Phe Ser Leu Asp Ser Gln Val Asn His Arg Met Lys Lys Glu		
210	215	220
Leu Pro Ser His Val Gln Ala Met His Lys Arg Lys Glu Phe Leu Asp		
225	230	235
Tyr Gln Leu Asp Glu Leu Ser Arg Gln Arg Ala Leu Cys Arg Gly Gly		
245	250	255
Arg Glu Ile Gln Arg Gln Glu Leu Asp Glu Asn Ile Ser Lys Val Ser		
260	265	270
Lys Glu Arg Gln Glu Leu Ala Ser Lys Ile Lys Glu Val Gln Gly Arg		
275	280	285
Pro Gln Lys Thr Gln Ser Ile Ile Ile Leu Glu Ser His Ile Ile Cys		
290	295	300
Cys Thr Leu Ser Thr Ser Gly Gly Leu Leu Leu Glu Ser Ala Phe Arg		

305		310		315		320
Gly Gln Gly Gly Val Pro Phe Ser Cys Val Ile Val Asp Glu Ala Gly						
	325		330		335	
Gln Ser Cys Glu Ile Glu Thr Leu Thr Pro Leu Ile His Arg Cys Asn						
	340		345		350	
Lys Leu Ile Leu Val Gly Asp Pro Lys Gln Leu Pro Pro Thr Val Ile						
	355		360		365	
Ser Met Lys Ala Gln Glu Tyr Gly Tyr Asp Gln Ser Met Met Ala Arg						
	370		375		380	
Phe Cys Arg Leu Leu Glu Glu Asn Val Glu His Asn Met Ile Ser Arg						
	385		390		395	400
Leu Pro Ile Leu Gln Leu Thr Val Gln Tyr Arg Met His Pro Asp Ile						
	405		410		415	
Cys Leu Phe Pro Ser Asn Tyr Val Tyr Asn Arg Asn Leu Lys Thr Asn						
	420		425		430	
Arg Gln Thr Glu Ala Ile Arg Cys Ser Ser Asp Trp Pro Phe Gln Pro						
	435		440		445	
Tyr Leu Val Phe Asp Val Gly Asp Gly Ser Glu Arg Arg Asp Asn Asp						
	450		455		460	
Ser Tyr Ile Asn Val Gln Glu Ile Lys Leu Val Met Glu Ile Ile Lys						
	465		470		475	480
Leu Ile Lys Asp Lys Arg Lys Asp Val Ser Phe Arg Asn Ile Gly Ile						
	485		490		495	
Ile Thr His Tyr Lys Ala Gln Lys Thr Met Ile Gln Lys Asp Leu Asp						
	500		505		510	
Lys Glu Phe Asp Arg Lys Gly Pro Ala Glu Val Asp Thr Val Asp Ala						
	515		520		525	
Phe Gln Gly Arg Gln Lys Asp Cys Val Ile Val Thr Cys Val Arg Ala						
	530		535		540	
Asn Ser Ile Gln Gly Ser Ile Gly Phe Leu Ala Ser Leu Gln Arg Leu						
	545		550		555	560
Asn Val Thr Ile Thr Arg Ala Lys Tyr Ser Leu Phe Ile Leu Gly His						
	565		570		575	
Leu Arg Thr Leu Met Glu Asn Gln His Trp Asn Gln Leu Ile Gln Asp						
	580		585		590	
Ala Gln Lys Arg Gly Ala Ile Ile Lys Thr Cys Asp Lys Asn Tyr Arg						
	595		600		605	
His Asp Ala Val Lys Ile Leu Lys Leu Lys Pro Val Leu Gln Arg Ser						
	610		615		620	
Leu Thr His Pro Pro Thr Ile Ala Pro Glu Gly Ser Arg Pro Gln Gly						
	625		630		635	640
Gly Leu Pro Ser Ser Lys Leu Asp Ser Gly Phe Ala Lys Thr Ser Val						
	645		650		655	
Ala Ala Ser Leu Tyr His Thr Pro Ser Asp Ser Lys Glu Ile Thr Leu						
	660		665		670	
Thr Val Thr Ser Lys Asp Pro Glu Arg Pro Pro Val His Asp Gln Leu						
	675		680		685	
Gln Asp Pro Arg Leu Leu Lys Arg Met Gly Ile Glu Val Lys Gly Gly						
	690		695		700	
Ile Phe Leu Trp Asp Pro Gln Pro Ser Ser Pro Gln His Pro Gly Ala						
	705		710		715	720
Thr Pro Pro Thr Gly Glu Pro Gly Phe Pro Val Val His Gln Asp Leu						
	725		730		735	
Ser His Val Gln Gln Pro Ala Ala Val Val Ala Ala Leu Ser Ser His						
	740		745		750	
Lys Pro Pro Val Arg Gly Glu Pro Ala Ala Ser Pro Glu Ala Ser						
	755		760		765	
Thr Cys Gln Ser Lys Cys Asp Asp Pro Glu Glu Glu Leu Cys His Arg						
	770		775		780	
Arg Glu Ala Arg Ala Phe Ser Glu Gly Glu Gln Glu Lys Cys Gly Ser						
	785		790		795	800
Glu Thr His His Thr Arg Arg Asn Ser Arg Trp Asp Lys Arg Thr Leu						
	805		810		815	
Glu Gln Glu Asp Ser Ser Ser Lys Lys Arg Lys Leu Leu						

820

825

829

<210> 3926
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 3926
 Met Pro Arg Glu Asp Arg Ala Thr Trp Lys Ser Asn Tyr Phe Leu Lys
 1 5 10 15
 Ile Ile Gln Leu Leu Asp Asp Tyr Pro Lys Arg Phe Ile Val Gly Ala
 20 25 30
 Asn Asn Val Gly Ser Lys Gln Met Gln Gln Ile Arg Met Ser Leu Arg
 35 40 45
 Gly Lys Ala Val Val Leu Met Gly Lys Asn Thr Met Met Arg
 50 55 60 62

<210> 3927
 <211> 183
 <212> PRT
 <213> Homo sapiens

<400> 3927
 Ala His Leu Leu Met Leu Asn Leu Ala Leu Thr Asp Leu Leu Tyr Leu
 1 5 10 15
 Thr Ser Leu Pro Phe Leu Ile His Tyr Tyr Ala Ser Gly Glu Asn Trp
 20 25 30
 Ile Phe Gly Asp Phe Met Cys Lys Phe Ile Arg Phe Ser Phe His Phe
 35 40 45
 Asn Leu Tyr Ser Ser Ile Leu Phe Leu Thr Cys Phe Ser Ile Phe Arg
 50 55 60
 Tyr Cys Val Ile Ile His Pro Met Ser Cys Phe Ser Ile His Lys Thr
 65 70 75 80
 Arg Cys Ala Val Val Ala Cys Ala Val Val Trp Ile Ile Ser Leu Val
 85 90 95
 Ala Val Ile Pro Met Thr Phe Leu Ile Thr Ser Thr Asn Arg Thr Asn
 100 105 110
 Arg Ser Ala Cys Leu Asp Leu Thr Ser Ser Asp Glu Leu Asn Thr Ile
 115 120 125
 Lys Trp Tyr Asn Leu Ile Leu Thr Ala Leu Leu Cys Leu Pro Leu Val
 130 135 140
 Ile Val Thr Leu Cys Tyr Thr Thr Ile Ile His Thr Leu Thr His Gly
 145 150 155 160
 His Ala Asn Asp Ser Cys Leu Lys Gln Lys Ala Arg Arg Leu Thr Ile
 165 170 175
 Leu Leu Leu
 179

<210> 3928
 <211> 505
 <212> PRT
 <213> Homo sapiens

<400> 3928
 Gly Glu Glu Ala Val Gly Gly Gly Ala Glu Gly Gly Gly Phe Gly Val

1	5	10	15
Gly Ala Gln Gly Arg Ala Gly Gly Arg Gly Val Glu Ala Gly Arg Met			
20	25	30	
Arg Leu Ser Lys Thr Leu Val Asp Met Asp Met Ala Asp Tyr Ser Ala			
35	40	45	
Ala Leu Asp Pro Ala Tyr Thr Thr Leu Glu Phe Glu Asn Val Gln Val			
50	55	60	
Leu Thr Met Gly Asn Asp Thr Ser Pro Ser Glu Gly Thr Asn Leu Asn			
65	70	75	80
Ala Pro Asn Ser Leu Gly Val Ser Ala Leu Cys Ala Ile Cys Gly Asp			
85	90	95	
Arg Ala Thr Gly Lys His Tyr Gly Ala Ser Ser Cys Asp Gly Cys Lys			
100	105	110	
Gly Phe Phe Arg Arg Ser Val Arg Lys Asn His Met Tyr Ser Cys Arg			
115	120	125	
Phe Ser Arg Gln Cys Val Val Asp Lys Asp Lys Arg Asn Gln Cys Arg			
130	135	140	
Tyr Cys Arg Leu Lys Lys Cys Phe Arg Ala Gly Met Lys Lys Glu Ala			
145	150	155	160
Val Gln Asn Glu Arg Asp Arg Ile Ser Thr Arg Arg Ser Ser Tyr Glu			
165	170	175	
Asp Ser Ser Leu Pro Ser Ile Asn Ala Leu Leu Gln Ala Glu Val Leu			
180	185	190	
Ser Arg Gln Ile Thr Ser Pro Val Ser Gly Ile Asn Gly Asp Ile Arg			
195	200	205	
Ala Lys Lys Ile Ala Ser Ile Ala Asp Val Cys Glu Ser Met Lys Glu			
210	215	220	
Gln Leu Leu Val Leu Val Glu Trp Ala Lys Tyr Ile Pro Gly Phe Cys			
225	230	235	240
Glu Leu Pro Leu Asp Asp Gln Gly Ala Leu Leu Arg Ala His Ala Gly			
245	250	255	
Glu His Leu Leu Gly Ala Thr Lys Arg Ser Met Val Phe Lys Asp			
260	265	270	
Val Leu Leu Gly Asn Asp Tyr Ile Val Pro Arg His Cys Pro Glu			
275	280	285	
Leu Ala Glu Met Ser Arg Val Ser Ile Arg Ile Leu Asp Glu Leu Val			
290	295	300	
Leu Pro Phe Gln Glu Leu Gln Ile Asp Asp Asn Glu Tyr Ala Tyr Leu			
305	310	315	320
Lys Ala Ile Ile Phe Asp Pro Asp Ala Lys Gly Leu Ser Asp Pro			
325	330	335	
Gly Lys Ile Lys Arg Leu Arg Ser Gln Val Gln Val Ser Leu Glu Asp			
340	345	350	
Tyr Ile Asn Asp Arg Gln Tyr Asp Ser Arg Gly Arg Phe Gly Glu Leu			
355	360	365	
Leu Leu Leu Leu Pro Thr Leu Gln Ser Ile Thr Trp Gln Met Ile Glu			
370	375	380	
Gln Ile Gln Phe Ile Lys Leu Phe Gly Met Ala Lys Ile Asp Asn Leu			
385	390	395	400
Leu Gln Glu Met Leu Leu Gly Gly Ser Pro Ser Asp Ala Pro His Ala			
405	410	415	
His His Pro Leu His Pro His Leu Met Gln Glu His Met Gly Thr Asn			
420	425	430	
Val Ile Val Ala Asn Thr Met Pro Thr His Leu Ser Asn Gly Gln Met			
435	440	445	
Cys Glu Trp Pro Arg Pro Arg Gly Gln Ala Ala Thr Pro Glu Thr Pro			
450	455	460	
Gln Pro Ser Pro Pro Gly Ala Ser Gly Ser Glu Pro Tyr Lys Leu Leu			
465	470	475	480
Pro Gly Ala Val Ala Thr Ile Val Lys Pro Leu Ser Ala Ile Pro Gln			
485	490	495	
Pro Thr Ile Thr Lys Gln Glu Val Ile			
500	505		

<210> 3929
 <211> 927
 <212> PRT
 <213> Homo sapiens

<400> 3929
 Arg Val Leu Ser Leu Glu Ser Pro Leu Glu Lys Asp Pro Arg Val Leu
 1 5 10 15
 Gly Ala Gln Ser Val Pro Arg Gly Arg Ala Leu Lys Gly Leu Ser Pro
 20 25 30
 Leu Gly Leu Asp Ser Ala Phe Arg Leu Phe Pro Asp Pro Arg Ala Gly
 35 40 45
 Pro Trp Asn Thr Ala Val Leu Ser Ser Gly Met Glu Pro Glu Thr Ala
 50 55 60
 Leu Trp Gly Pro Asp Leu Gln Gly Pro Glu Gln Ser Pro Asn Asp Ala
 65 70 75 80
 His Arg Gly Ala Glu Ser Glu Asn Glu Glu Ser Pro Arg Gln Glu
 85 90 95
 Ser Ser Gly Glu Glu Ile Ile Met Gly Asp Pro Ala Gln Ser Pro Glu
 100 105 110
 Ser Lys Asp Ser Thr Glu Met Ser Leu Glu Arg Ser Ser Gln Asp Pro
 115 120 125
 Ser Val Pro Gln Asn Pro Pro Thr Pro Leu Gly His Ser Asn Pro Leu
 130 135 140
 Asp His Gln Ile Pro Leu Asp Pro Pro Ala Pro Glu Val Val Pro Thr
 145 150 155 160
 Pro Ser Asp Trp Thr Lys Ala Cys Glu Ala Ser Trp Gln Trp Gly Ala
 165 170 175
 Leu Thr Thr Trp Asn Ser Pro Pro Val Val Pro Ala Asn Glu Pro Ser
 180 185 190
 Leu Arg Glu Leu Val Gln Gly Arg Pro Ala Gly Ala Glu Lys Pro Tyr
 195 200 205
 Ile Cys Asn Glu Cys Gly Lys Ser Phe Ser Gln Trp Ser Lys Leu Leu
 210 215 220
 Arg His Gln Arg Ile His Thr Gly Glu Arg Pro Asn Thr Cys Ser Glu
 225 230 235 240
 Cys Gly Lys Ser Phe Thr Gln Ser Ser His Leu Val Gln His Gln Arg
 245 250 255
 Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Pro Asp Cys Gly Lys Cys
 260 265 270
 Phe Ser Trp Ser Ser Asn Leu Val Gln His Gln Arg Thr His Thr Gly
 275 280 285
 Glu Lys Pro Tyr Lys Cys Thr Glu Cys Glu Lys Ala Phe Thr Gln Ser
 290 295 300
 Thr Asn Leu Ile Lys His Gln Arg Ser His Thr Gly Glu Lys Pro Tyr
 305 310 315 320
 Lys Cys Gly Glu Cys Arg Arg Ala Phe Tyr Arg Ser Ser Asp Leu Ile
 325 330 335
 Gln His Gln Ala Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Pro Glu
 340 345 350
 Cys Gly Lys Arg Phe Gly Gln Asn His Asn Leu Leu Lys His Gln Lys
 355 360 365
 Ile His Ala Gly Glu Lys Pro Tyr Arg Cys Thr Glu Cys Gly Lys Ser
 370 375 380
 Phe Ile Gln Ser Ser Glu Leu Thr Gln His Gln Arg Thr His Thr Gly
 385 390 395 400
 Glu Lys Pro Tyr Glu Cys Leu Glu Cys Gly Lys Ser Phe Gly His Ser
 405 410 415
 Ser Thr Leu Ile Lys His Gln Arg Thr His Leu Arg Glu Asp Pro Phe
 420 425 430
 Lys Cys Pro Val Cys Gly Lys Thr Phe Thr Leu Ser Ala Thr Leu Leu

435	440	445
Arg His Gln Arg Thr His Thr Gly Glu Arg Pro Tyr Lys Cys Pro Glu		
450	455	460
Cys Gly Lys Ser Phe Ser Val Ser Ser Asn Leu Ile Asn His Gln Arg		
465	470	475
Ile His Arg Gly Glu Arg Pro Tyr Ile Cys Ala Asp Cys Gly Lys Ser		480
	485	490
Phe Ile Met Ser Ser Thr Leu Ile Arg His Gln Arg Ile His Thr Gly		495
	500	505
Glu Lys Pro Tyr Lys Cys Ser Asp Cys Gly Lys Ser Phe Ile Arg Ser		510
	515	520
Ser His Leu Ile Gln His Arg Arg Thr His Thr Gly Glu Lys Pro Tyr		525
	530	535
Lys Cys Pro Glu Cys Gly Lys Ser Phe Ser Gln Ser Ser Asn Leu Ile		540
545	550	555
Thr His Val Arg Thr His Met Asp Glu Asn Leu Phe Val Cys Ser Asp		560
	565	570
Cys Gly Lys Ala Phe Leu Glu Ala His Glu Leu Glu Gln His Arg Val		575
	580	585
Ile His Glu Arg Gly Lys Thr Pro Ala Arg Arg Ala Gln Gly Asp Ser		590
	595	600
Leu Leu Gly Leu Gly Asp Pro Ser Leu Leu Thr Pro Pro Pro Gly Ala		605
	610	615
Lys Pro His Lys Cys Leu Val Cys Gly Lys Gly Phe Asn Asp Glu Gly		620
625	630	635
Ile Phe Met Gln His Gln Arg Ile His Ile Gly Glu Asn Pro Tyr Lys		640
	645	650
Asn Ala Asp Gly Leu Ile Ala His Ala Ala Pro Lys Pro Pro Gln Leu		655
	660	665
Arg Ser Pro Arg Leu Pro Phe Arg Gly Asn Ser Tyr Pro Gly Ala Ala		670
	675	680
Glu Gly Arg Ala Glu Ala Pro Gly Gln Pro Leu Lys Pro Pro Glu Gly		685
	690	695
Gln Glu Gly Phe Ser Gln Arg Arg Gly Leu Leu Ser Ser Lys Thr Tyr		700
705	710	715
Ile Cys Ser His Cys Gly Glu Ser Phe Leu Asp Arg Ser Val Leu Leu		720
	725	730
Gln His Gln Leu Thr His Gly Asn Glu Lys Pro Phe Leu Phe Pro Asp		735
	740	745
Tyr Arg Ile Gly Leu Gly Glu Gly Ala Gly Pro Ser Pro Phe Leu Ser		750
	755	760
Gly Lys Pro Phe Lys Cys Pro Glu Cys Lys Gln Ser Phe Gly Leu Ser		765
	770	775
Ser Glu Leu Leu Leu His Gln Lys Val His Ala Gly Gly Lys Ser Ser		780
785	790	795
His Lys Ser Pro Glu Leu Gly Lys Ser Ser Ser Val Leu Leu Glu His		800
	805	810
Leu Arg Ser Pro Leu Gly Ala Arg Pro Tyr Arg Cys Ser Asp Cys Arg		815
	820	825
Ala Ser Phe Leu Asp Arg Val Ala Leu Thr Arg His Gln Glu Thr His		830
	835	840
Thr Gln Glu Lys Pro Pro Asn Pro Glu Asp Pro Pro Pro Glu Ala Val		845
	850	855
Thr Leu Ser Thr Asp Gln Glu Gly Glu Gly Glu Thr Pro Thr Pro Thr		860
865	870	875
Glu Ser Ser Ser His Gly Glu Gly Gln Asn Pro Lys Thr Leu Val Glu		880
	885	890
Glu Lys Pro Tyr Leu Cys Pro Glu Cys Gly Ala Gly Phe Thr Glu Val		895
	900	905
Ala Ala Leu Leu Leu His Arg Ser Cys His Pro Gly Val Ser Leu		910
	915	920
		925
		927

<210> 3930
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 3930
 Lys Thr Gln Glu Thr His Ile Tyr Ile Ser Glu His Ile Phe Phe Pro
 1 5 10 15
 Phe Leu Gln Gly Phe Gly Asn Leu Pro Ile Cys Met Ala Lys Thr Asp
 20 25 30
 Leu Ser Leu Ser His Gln Pro Asp Lys Lys Gly Val Pro Ser Asp Phe
 35 40 45
 Ile Leu Pro Ile Ser Asp Val Arg Ala Ser Ile Gly Ala Gly Phe Ile
 50 55 60
 Tyr Pro Leu Val Gly Thr Gly Ser Arg Glu Ser Pro Leu Trp Leu
 65 70 75 79

<210> 3931
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 3931
 Lys Arg Arg Asp Phe Leu Ser Cys Trp Pro Ala Phe Thr Val Leu Gly
 1 5 10 15
 Glu Ala Arg Gly Asp Gln Val Asp Trp Ser Lys Leu Tyr Arg Asp Thr
 20 25 30
 Gly Leu Val Lys Met Ser Arg Lys Pro Arg Ala Ser Ser Pro Phe Ser
 35 40 45
 Asn Asn His Pro Ser Thr Pro Lys Arg Arg Gly Arg Gly Lys His Pro
 50 55 60
 Leu Ile Pro Gly Pro Glu Ala Leu Ser Lys Phe Pro Arg Gln Pro Ile
 65 70 75 80
 Arg Glu Lys Gly Pro Val Lys Glu Val Pro Gly Thr Lys Gly Ser Pro
 85 90 95 96

<210> 3932
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 3932
 Lys Arg Arg Asp Phe Leu Ser Cys Trp Pro Ala Phe Thr Val Leu Gly
 1 5 10 15
 Glu Ala Arg Gly Asp Gln Val Asp Trp Ser Lys Leu Tyr Arg Asp Thr
 20 25 30
 Gly Leu Val Lys Met Ser Arg Lys Pro Arg Ala Ser Ser Pro Phe Ser
 35 40 45
 Asn Asn His Pro Ser Thr Pro Lys Arg Arg Gly Arg Gly Lys His Pro
 50 55 60
 Leu Ile Pro Gly Pro Glu Ala Leu Ser Lys Phe Pro Arg Gln Pro Ile
 65 70 75 80
 Arg Glu Lys Gly Pro Val Lys Glu Val Pro Gly Thr Lys Gly Ser Pro
 85 90 95 96

<210> 3933
 <211> 515
 <212> PRT
 <213> Homo sapiens

<400> 3933
 Ser Thr His Ala Ser Glu His Trp Asp Ser Ala Leu Gln Leu Ala Lys
 1 5 10 15
 His Leu Ala Pro Asp Gln Ile Pro Phe Ile Ser Lys Glu Tyr Ala Ile
 20 25 30
 Gln Leu Glu Phe Ala Gly Asp Tyr Val Asn Ala Leu Ala His Tyr Glu
 35 40 45
 Lys Gly Ile Thr Gly Asp Asn Lys Glu His Asp Glu Ala Cys Leu Ala
 50 55 60
 Gly Val Ala Gln Met Ser Ile Arg Met Gly Asp Ile Arg Arg Gly Val
 65 70 75 80
 Asn Gln Ala Leu Lys His Pro Ser Arg Val Leu Lys Arg Asp Cys Gly
 85 90 95
 Ala Ile Leu Glu Asn Met Lys Gln Phe Ser Glu Ala Ala Gln Leu Tyr
 100 105 110
 Glu Lys Gly Leu Tyr Tyr Asp Lys Ala Ala Ser Val Tyr Ile Arg Ser
 115 120 125
 Lys Asn Trp Ala Lys Val Gly Asp Leu Leu Pro His Val Ser Ser Pro
 130 135 140
 Lys Ile His Leu Gln Tyr Ala Lys Ala Lys Glu Ala Asp Gly Arg Tyr
 145 150 155 160
 Lys Glu Ala Val Val Ala Tyr Glu Asn Ala Lys Gln Trp Gln Ser Val
 165 170 175
 Ile Arg Ile Tyr Leu Asp His Leu Asn Asn Pro Glu Lys Ala Val Asn
 180 185 190
 Ile Val Arg Glu Thr Gln Ser Leu Asp Gly Ala Lys Met Val Ala Arg
 195 200 205
 Phe Phe Leu Gln Leu Gly Asp Tyr Gly Ser Ala Ile Gln Phe Leu Val
 210 215 220
 Met Ser Lys Cys Asn Asn Glu Ala Phe Thr Leu Ala Gln Gln His Asn
 225 230 235 240
 Lys Met Glu Ile Tyr Ala Asp Ile Ile Gly Ser Glu Asp Thr Thr Asn
 245 250 255
 Glu Asp Tyr Gln Ser Ile Ala Leu Tyr Phe Glu Gly Glu Lys Arg Tyr
 260 265 270
 Leu Gln Ala Gly Lys Phe Phe Leu Leu Cys Gly Gln Tyr Ser Arg Ala
 275 280 285
 Leu Lys His Phe Leu Lys Cys Pro Ser Ser Glu Asp Asn Val Ala Ile
 290 295 300
 Glu Met Ala Ile Glu Thr Val Gly Gln Ala Lys Asp Glu Leu Leu Thr
 305 310 315 320
 Asn Gln Leu Ile Asp His Leu Leu Gly Glu Asn Asp Gly Met Pro Lys
 325 330 335
 Asp Ala Lys Tyr Leu Phe Arg Leu Tyr Met Ala Leu Lys Gln Tyr Arg
 340 345 350
 Glu Ala Ala Gln Thr Ala Ile Ile Ala Arg Glu Glu Gln Ser Ala
 355 360 365
 Gly Asn Tyr Arg Asn Ala His Asp Val Leu Phe Ser Met Tyr Ala Glu
 370 375 380
 Leu Lys Ser Gln Lys Ile Lys Ile Pro Ser Glu Met Ala Thr Asn Leu
 385 390 395 400
 Met Ile Leu His Ser Tyr Ile Leu Val Lys Ile His Val Lys Asn Gly
 405 410 415
 Asp His Met Lys Gly Ala Arg Met Leu Ile Arg Val Ala Asn Asn Ile

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          420          425          430
Ser Lys Phe Pro Ser His Ile Val Pro Ile Leu Thr Ser Thr Val Ile
          435          440          445
Glu Cys His Arg Ala Gly Leu Lys Asn Ser Ala Phe Ser Phe Ala Ala
          450          455          460
Met Leu Met Arg Pro Glu Tyr Arg Ser Lys Ile Asp Ala Lys Tyr Lys
465          470          475          480
Lys Lys Ile Glu Gly Met Val Arg Arg Pro Asp Ile Ser Glu Ile Glu
          485          490          495
Glu Ala Thr Thr Pro Cys Pro Phe Cys Lys Phe Leu Leu Pro Glu Ser
          500          505          510
Glu Leu Leu
          515

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<210> 3934
<211> 312
<212> PRT
<213> Homo sapiens

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          <400> 3934
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Val Pro Ser Pro Leu Gln Gly Lys Gln His Thr Leu Val Lys Ser Cys
          20          25          30
Leu Ser Val Ser Gly Ile Gly Gly Phe Leu Val Ser Leu Ser Ser Arg
          35          40          45
Met Lys Leu Gln Thr Leu Ala Val Ser Val Thr Ala Leu Lys Phe Trp
          50          55          60
Ser Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg Asp Ala Leu Arg Leu
          65          70          75          80
Thr Leu Glu Gln Ile Asp Leu Ile Arg Arg Met Cys Ala Ser Tyr Ser
          85          90          95
Glu Leu Glu Leu Val Thr Ser Ala Lys Ala Leu Asn Asp Thr Gln Lys
          100          105          110
Leu Ala Cys Leu Ile Gly Val Glu Gly Gly His Ser Leu Asp Asn Ser
          115          120          125
Leu Ser Ile Leu Arg Thr Phe Tyr Met Leu Gly Val Arg Tyr Leu Thr
          130          135          140
Leu Thr His Thr Cys Asn Thr Pro Trp Ala Glu Ser Ser Ala Lys Gly
          145          150          155          160
Val His Ser Phe Tyr Asn Asn Ile Ser Gly Leu Thr Asp Phe Gly Glu
          165          170          175
Lys Val Val Ala Glu Met Asn Arg Leu Gly Met Met Val Asp Leu Ser
          180          185          190
His Val Ser Asp Ala Val Ala Arg Arg Ala Leu Glu Val Ser Gln Ala
          195          200          205
Pro Val Ile Phe Ser His Ser Ala Ala Arg Gly Val Cys Asn Ser Ala
          210          215          220
Arg Asn Val Pro Asp Asp Ile Leu Gln Leu Leu Glu Glu Glu Arg Trp
          225          230          235          240
Ala Phe Val Met Val Ser Leu Phe His Gly Glu Leu Ile Gln Trp Gln
          245          250          255
Pro Ile Arg Pro Met Cys Ser Thr Val Ala Asp His Phe Asp His Ile
          260          265          270
Lys Ala Val Ile Gly Ser Lys Phe Ile Gly Ile Gly Gly Asp Tyr Asp
          275          280          285
Gly Ala Gly Lys Tyr Arg Lys Lys Thr Thr Cys Lys Ala Pro Trp Arg
          290          295          300
Thr Ser Ser Arg Met Ser Ser
          305          310          311

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<210> 3935
 <211> 294
 <212> PRT
 <213> Homo sapiens

<400> 3935
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 20 25 30
 Tyr Trp Arg Thr Ser Ser Phe Arg Met Thr Glu His Asn Ser Val Lys
 35 40 45
 Pro Trp Gln Gln Leu Asn His His Pro Gly Thr Thr Lys Leu Thr Arg
 50 55 60
 Lys Asp Cys Leu Ala Lys His Leu Lys His Met Arg Arg Met Tyr Gly
 65 70 75 80
 Thr Ser Leu Tyr Gln Phe Ile Pro Leu Thr Phe Val Met Pro Asn Asp
 85 90 95
 Tyr Thr Lys Phe Val Ala Glu Tyr Phe Gln Glu Arg Gln Met Leu Gly
 100 105 110
 Thr Lys His Ser Tyr Trp Ile Cys Lys Pro Ala Glu Leu Ser Arg Gly
 115 120 125
 Arg Gly Ile Leu Ile Phe Ser Asp Phe Lys Asp Phe Ile Phe Asp Asp
 130 135 140
 Met Tyr Ile Val Gln Lys Tyr Ile Ser Asn Pro Leu Leu Ile Gly Arg
 145 150 155 160
 Tyr Lys Cys Asp Leu Arg Ile Tyr Val Cys Val Thr Gly Phe Lys Pro
 165 170 175
 Leu Thr Ile Tyr Val Tyr Gln Glu Gly Leu Val Arg Phe Ala Thr Glu
 180 185 190
 Lys Phe Asp Leu Ser Asn Leu Gln Asn Asn Tyr Ala His Leu Thr Asn
 195 200 205
 Ser Ser Ile Asn Lys Ser Gly Ala Ser Tyr Glu Lys Ile Lys Glu Val
 210 215 220
 Ile Gly His Gly Cys Lys Trp Thr Leu Ser Arg Phe Phe Ser Tyr Leu
 225 230 235 240
 Arg Ser Trp Asp Val Asp Asp Leu Leu Leu Trp Lys Lys Ile His Arg
 245 250 255
 Met Val Ile Leu Thr Ile Leu Ala Ile Ala Pro Ser Val Pro Phe Ala
 260 265 270
 Ala Asn Cys Phe Glu Leu Phe Gly Phe Asp Ile Leu Ile Asp Asp Asn
 275 280 285
 Glu Phe His Arg Thr Gly
 290 294

<210> 3936
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 3936
 His Leu Ala His Ser Leu Gly Pro Leu Pro Lys His Tyr Gln Tyr Cys
 1 5 10 15
 Val Arg Tyr Leu Tyr Tyr Gln Val Thr Lys Asp Val Ile Lys Glu Phe
 20 25 30
 Ala Asp Asp Gly Val Lys Tyr Leu Glu Leu Arg Ser Thr Pro Arg Arg
 35 40 45
 Glu Asn Ala Thr Gly Met Thr Lys Lys Thr Tyr Val Glu Ser Ile Leu

5699

135	140	145	
cag gtg gaa ggc atg aag atc gaa gaa gag tcc gag gcc atg gct gag Gln Val Glu Gly Met Lys Ile Glu Glu Glu Ser Glu Ala Met Ala Glu 150 155 160			777
aag ttc ctg gag ggc gag gtg ccc ctg gaa acg ttc ctg gag aat ttt Lys Phe Leu Glu Gly Glu Val Pro Leu Glu Thr Phe Leu Glu Asn Phe 165 170 175			825
tcc tcc atg agg atg ctg tcc cac ctg cgc cgg gtt cgc gtg gaa aag Ser Ser Met Arg Met Leu Ser His Leu Arg Arg Val Arg Val Glu Lys 180 185 190			873
ctc cag gaa gtg gtg agg aag ccc agg gct tcc cag gag ctg gcc ggc Leu Gln Glu Val Val Arg Lys Pro Arg Ala Ser Gln Glu Leu Ala Gly 195 200 205 210			921
gat gcc cct cca ccc cgt cca cca ccc ccg gtg cgc cca gtc ccc cag Asp Ala Pro Pro Pro Arg Pro Pro Pro Pro Val Arg Pro Val Pro Gln 215 220 225			969
gga aca ccc cct gtg gtt gaa gag cag ccg cag cca cca tta gcc atg Gly Thr Pro Pro Val Val Glu Glu Gln Pro Gln Pro Pro Leu Ala Met 230 235 240			1017
cct ccc tac cct ttg ccc tac agc cca tcc ccc agc ctg cct gtg ggc Pro Pro Tyr Pro Leu Pro Tyr Ser Pro Ser Pro Ser Leu Pro Val Gly 245 250 255			1065
ccc act gcc cat gga gcc ctg cca ccg gcc cct ttc cca gta gtg tcc Pro Thr Ala His Gly Ala Leu Pro Pro Ala Pro Phe Pro Val Val Ser 260 265 270			1113
cag ccc tcc ttc tac agc ggg cct ctg ggc ccc act tac ccg gca gcc Gln Pro Ser Phe Tyr Ser Gly Pro Leu Gly Pro Thr Tyr Pro Ala Ala 275 280 285 290			1161
cag ctt gga ccc agg gtc cca ccc acg ctc aac ctt tgg ccc agc cat Gln Leu Gly Pro Arg Val Pro Pro Thr Leu Asn Leu Trp Pro Ser His 295 300 305			1209
cgc cga gat tgc agg gtc aac tgg aag tgg cgt tgg tgc tcc ctg tgg Arg Arg Asp Ser Arg Val Asn Trp Lys Trp Arg Trp Cys Ser Leu Trp 310 315 320			1257
act tgc gtc ggc acc cag agg cct tgg agg gac aag gca ctg ggc ggt Thr Cys Val Gly Thr Gln Arg Pro Trp Arg Asp Lys Ala Leu Gly Gly 325 330 335			1305
gtg act ggt cat ggc act tgc tgg cct tct ggc cag agg tcc tcc tgg Val Thr Gly His Gly Thr Cys Trp Pro Ser Gly Gln Arg Ser Ser Trp 340 345 350			1353
aag ccc ctc ctt tca gtg cct ggc tgc agc ggt gct agc cag gct gga Lys Pro Leu Leu Ser Val Pro Gly Cys Ser Gly Ala Ser Gln Ala Gly 355 360 365 370			1401
gtc cag cac ctc tgc ccg gtg tct gtg tga g tgagcgcacatg tgcgcattta Val Gln His Leu Ser Pro Val Ser Val *			1452
	375	380	
tgagcatcta cttgcggctg cactcagggc catttgaacc cagtgcagag ttatctctat			1512

gaggaggccc cgggtctcca gccccctcca tctccctgg ggtttggcat atttgacatg 1572
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 c 1633

<210> 3938
 <211> 2914
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1) .. (2583)

<400> 3938
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 gtg ccc aga aga cct ggc tat ggc gcc atg ggc aaa ccc att aaa ctg 96
 Val Pro Arg Arg Pro Gly Tyr Gly Ala Met Gly Lys Pro Ile Lys Leu
 20 25 30
 ctg gct aac tgt ttt caa gtt gaa atc cca aag att gat gtc tac ctc 144
 Leu Ala Asn Cys Phe Gln Val Glu Ile Pro Lys Ile Asp Val Tyr Leu
 35 40 45
 tat gag gta gat att aaa cca gac aag tgt cct agg aga gtg aac agg 192
 Tyr Glu Val Asp Ile Lys Pro Asp Lys Cys Pro Arg Arg Val Asn Arg
 50 55 60
 gag gtg gtt gac tca atg gtt cag cat ttt aaa gta act ata ttt gga 240
 Glu Val Val Asp Ser Met Val Gln His Phe Lys Val Thr Ile Phe Gly
 65 70 75 80
 gac cgt aga cca gtt tat gat gga aaa aga agt ctt tac acc gcc aat 288
 Asp Arg Arg Pro Val Tyr Asp Gly Lys Arg Ser Leu Tyr Thr Ala Asn
 85 90 95
 cca ctt cct gtg gca act aca ggg gta gat tta gac gtt act tta cct 336
 Pro Leu Pro Val Ala Thr Thr Gly Val Asp Leu Asp Val Thr Leu Pro
 100 105 110
 ggg gaa ggt gga aaa gat cga cct ttc aag gtg tca atc aaa ttt gtc 384
 Gly Glu Gly Gly Lys Asp Arg Pro Phe Lys Val Ser Ile Lys Phe Val
 115 120 125
 tct cgg gtg agt tgg cac cta ctg cat gaa gta ctg aca gga cgg act 432
 Ser Arg Val Ser Trp His Leu Leu His Glu Val Leu Thr Gly Arg Thr
 130 135 140
 ttg cct gag cca ctg gaa tta gac aag cca atc agc act aac cct gtc 480
 Leu Pro Glu Pro Leu Glu Leu Asp Lys Pro Ile Ser Thr Asn Pro Val
 145 150 155 160
 cat gcc gtt gat gtg gtg cta cga cat ctg ccc tcc atg aaa tac aca 528
 His Ala Val Asp Val Val Leu Arg His Leu Pro Ser Met Lys Tyr Thr
 165 170 175
 cct gtg ggg cgt tca ttt ttc tcc gct cca gaa gga tat gac cac cct 576

Pro	Val	Gly	Arg	Ser	Phe	Phe	Ser	Ala	Pro	Glu	Gly	Tyr	Asp	His	Pro		
			180					185					190				
ctg	gga	ggg	ggc	agg	gaa	gtg	tgg	ttt	gga	ttc	cat	cag	tct	gtt	cgg	624	
Leu	Gly	Gly	Gly	Arg	Glu	Val	Trp	Phe	Gly	Phe	His	Gln	Ser	Val	Arg		
		195					200					205					
cct	gcc	atg	tgg	aaa	atg	atg	ctt	aat	atc	gat	gtt	tct	gcc	act	gcc	672	
Pro	Ala	Met	Trp	Lys	Met	Met	Leu	Asn	Ile	Asp	Val	Ser	Ala	Thr	Ala		
	210					215				220							
ttc	tac	aaa	gca	caa	cct	gta	att	cag	ttc	atg	tgt	gaa	gtt	ctt	gat	720	
Phe	Tyr	Lys	Ala	Gln	Pro	Val	Ile	Gln	Phe	Met	Cys	Glu	Val	Leu	Asp		
225				230				235						240			
att	cat	aat	att	gat	gag	caa	cca	aga	cct	ctg	act	gat	tct	cat	cgg	768	
Ile	His	Asn	Ile	Asp	Glu	Gln	Pro	Arg	Pro	Leu	Thr	Asp	Ser	His	Arg		
			245					250						255			
gta	aaa	ttc	acc	aaa	gag	ata	aaa	ggg	ttg	aag	gtt	gaa	gtg	act	cat	816	
Val	Lys	Phe	Thr	Lys	Glu	Ile	Lys	Gly	Leu	Lys	Val	Glu	Val	Thr	His		
			260					265					270				
tgt	gga	aca	atg	aga	cgg	aaa	tac	cgt	gtt	tgt	aat	gta	aca	agg	agg	864	
Cys	Gly	Thr	Met	Arg	Arg	Lys	Tyr	Arg	Val	Cys	Asn	Val	Thr	Arg	Arg		
	275					280					285						
cct	gcc	agt	cat	caa	acc	ttt	cct	tta	cag	tta	gaa	aac	ggc	caa	act	912	
Pro	Ala	Ser	His	Gln	Thr	Phe	Pro	Leu	Gln	Leu	Glu	Asn	Gly	Gln	Thr		
	290					295					300						
gtg	gag	aga	aca	gta	gcg	cag	tat	ttc	aga	gaa	aag	tat	act	ctt	cag	960	
Val	Glu	Arg	Thr	Val	Ala	Gln	Tyr	Phe	Arg	Glu	Lys	Tyr	Thr	Leu	Gln		
305				310					315					320			
ctg	aag	tac	ccg	cac	ctt	ccc	tgt	ctg	caa	gtc	ggg	cag	gaa	cag	aaa	1008	
Leu	Lys	Tyr	Pro	His	Leu	Pro	Cys	Leu	Gln	Val	Gly	Gln	Glu	Gln	Lys		
				325				330						335			
cac	acc	tac	ctg	cca	cta	gaa	gtc	tgt	aat	att	gtg	gca	ggg	caa	cga	1056	
His	Thr	Tyr	Leu	Pro	Leu	Glu	Val	Cys	Asn	Ile	Val	Ala	Gly	Gln	Arg		
			340					345					350				
tgt	atc	aag	aag	cta	aca	gac	aat	cag	act	tcc	act	atg	atc	aag	gca	1104	
Cys	Ile	Lys	Lys	Leu	Thr	Asp	Asn	Gln	Thr	Ser	Thr	Met	Ile	Lys	Ala		
	355					360						365					
aca	gca	aga	tct	gca	cca	gat	aga	caa	gag	gaa	att	agc	aga	ttg	gta	1152	
Thr	Ala	Arg	Ser	Ala	Pro	Asp	Arg	Gln	Glu	Glu	Ile	Ser	Arg	Leu	Val		
	370					375					380						
aga	agt	gca	aat	tat	gaa	aca	gat	cca	ttt	gtt	cag	gag	ttt	caa	ttt	1200	
Arg	Ser	Ala	Asn	Tyr	Glu	Thr	Asp	Pro	Phe	Val	Gln	Glu	Phe	Gln	Phe		
385				390					395					400			
aaa	gtt	cgg	gat	gaa	atg	gct	cat	gta	act	gga	cgc	gta	ctt	cca	gca	1248	
Lys	Val	Arg	Asp	Glu	Met	Ala	His	Val	Thr	Gly	Arg	Val	Leu	Pro	Ala		
				405				410						415			
cct	atg	ctc	cag	tat	gga	gga	cgg	aat	cgg	aca	gta	gca	aca	ccg	agc	1296	
Pro	Met	Leu	Gln	Tyr	Gly	Gly	Arg	Asn	Arg	Thr	Val	Ala	Thr	Pro	Ser		
			420					425					430				
cat	gga	gta	tgg	gac	atg	cga	ggg	aaa	caa	ttc	cac	aca	gga	gtt	gaa	1344	

His Gly Val Trp Asp Met Arg Gly Lys Gln Phe His Thr Gly Val Glu	
435 440 445	
atc aaa atg tgg gct atc gct tgt ttt gcc aca cag agg cag tgc aga	1392
Ile Lys Met Trp Ala Ile Ala Cys Phe Ala Thr Gln Arg Gln Cys Arg	
450 455 460	
gaa gaa ata ttg aag ggt ttc aca gac cag ctg cgt aag att tct aag	1440
Glu Glu Ile Leu Lys Gly Phe Thr Asp Gln Leu Arg Lys Ile Ser Lys	
465 470 475 480	
gat gca ggg atg ccc atc cag ggc cag cca tgc ttc tgc aaa tat gca	1488
Asp Ala Gly Met Pro Ile Gln Gly Gln Pro Cys Phe Cys Lys Tyr Ala	
485 490 495	
cag ggg gca gac agc gta gag ccc atg ttc cgg cat ctc aag aac aca	1536
Gln Gly Ala Asp Ser Val Glu Pro Met Phe Arg His Leu Lys Asn Thr	
500 505 510	
tat tct ggc cta cag ctt att atc gtc atc ctg ccg ggg aag aca cca	1584
Tyr Ser Gly Leu Gln Leu Ile Ile Val Ile Leu Pro Gly Lys Thr Pro	
515 520 525	
gtg tat gcg gaa gtg aaa cgt gta gga gac aca ctt ttg ggt atg gct	1632
Val Tyr Ala Glu Val Lys Arg Val Gly Asp Thr Leu Leu Gly Met Ala	
530 535 540	
aca caa tgt gtt caa gtc aag aat gta ata aaa aca tct cct caa act	1680
Thr Gln Cys Val Gln Val Lys Asn Val Ile Lys Thr Ser Pro Gln Thr	
545 550 555 560	
ctg tca aac ttg tgc cta aag ata aat gtt aaa ctc gga ggg atc aat	1728
Leu Ser Asn Leu Cys Leu Lys Ile Asn Val Lys Leu Gly Gly Ile Asn	
565 570 575	
aat att ctt gta cct cat caa aga cct tct gtg ttc cag caa cca gtg	1776
Asn Ile Leu Val Pro His Gln Arg Pro Ser Val Phe Gln Gln Pro Val	
580 585 590	
atc ttt ttg gga gcc gat gtc act cat cca cct gct ggt gat gga aag	1824
Ile Phe Leu Gly Ala Asp Val Thr His Pro Pro Ala Gly Asp Gly Lys	
595 600 605	
aag cct tct att gct gct gtt gta ggt agt atg gat gca cac cca agc	1872
Lys Pro Ser Ile Ala Ala Val Val Gly Ser Met Asp Ala His Pro Ser	
610 615 620	
aga tac tgt gcc aca gta aga gtt cag aga ccc cga cag gag atc atc	1920
Arg Tyr Cys Ala Thr Val Arg Val Gln Arg Pro Arg Gln Glu Ile Ile	
625 630 635 640	
cag gac ttg gcc tcc atg gtc cgg gaa ctt ctt att caa ttt tat aag	1968
Gln Asp Leu Ala Ser Met Val Arg Glu Leu Leu Ile Gln Phe Tyr Lys	
645 650 655	
tca act cgg ttc aag cct act cgt atc atc ttt tat cgg gat ggt gtt	2016
Ser Thr Arg Phe Lys Pro Thr Arg Ile Ile Phe Tyr Arg Asp Gly Val	
660 665 670	
tca gag ggg cag ttt agg cag gta tta tat tat gaa cta cta gca att	2064
Ser Glu Gly Gln Phe Arg Gln Val Leu Tyr Tyr Glu Leu Leu Ala Ile	
675 680 685	
cga gaa gcc tgc atc agt ttg gag aaa gac tat caa cct gga ata acc	2112

Arg	Glu	Ala	Cys	Ile	Ser	Leu	Glu	Lys	Asp	Tyr	Gln	Pro	Gly	Ile	Thr		
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tac	att	gta	gtt	cag	aag	aga	cat	cac	act	cga	tta	ttt	tgt	gct	gat		2160
Tyr	Ile	Val	Val	Gln	Lys	Arg	His	His	Thr	Arg	Leu	Phe	Cys	Ala	Asp		
705				710					715						720		
agg	aca	gaa	agg	gtt	gga	aga	agt	ggc	aat	atc	cca	gct	gga	aca	aca		2208
Arg	Thr	Glu	Arg	Val	Gly	Arg	Ser	Gly	Asn	Ile	Pro	Ala	Gly	Thr	Thr		
				725					730						735		
gtt	gat	aca	gac	att	aca	cac	cca	tat	gag	ttc	gat	ttt	tac	ctc	tgt		2256
Val	Asp	Thr	Asp	Ile	Thr	His	Pro	Tyr	Glu	Phe	Asp	Phe	Tyr	Leu	Cys		
				740					745						750		
agc	cat	gct	gga	ata	cag	ggc	acc	agt	cgt	cct	tca	cac	tat	cat	gtt		2304
Ser	His	Ala	Gly	Ile	Gln	Gly	Thr	Ser	Arg	Pro	Ser	His	Tyr	His	Val		
		755					760								765		
tta	tgg	gat	gat	aac	tgc	ttt	act	gca	gat	gaa	ctt	cag	ctg	cta	act		2352
Leu	Trp	Asp	Asp	Asn	Cys	Phe	Thr	Ala	Asp	Glu	Leu	Gln	Leu	Leu	Thr		
		770					775								780		
tac	cag	ctc	tgc	cac	act	tac	gta	cgc	tgt	aca	cga	tct	gtt	tct	ata		2400
Tyr	Gln	Leu	Cys	His	Thr	Tyr	Val	Arg	Cys	Thr	Arg	Ser	Val	Ser	Ile		
		785					790				795				800		
cct	gca	cca	gcg	tat	tat	gct	cac	ctg	gta	gca	ttt	aga	gcc	aga	tat		2448
Pro	Ala	Pro	Ala	Tyr	Tyr	Ala	His	Leu	Val	Ala	Phe	Arg	Ala	Arg	Tyr		
				805						810					815		
cat	ctt	gtg	gac	aaa	gaa	cat	gac	agt	gct	gaa	gga	agt	cac	gtt	tca		2496
His	Leu	Val	Asp	Lys	Glu	His	Asp	Ser	Ala	Glu	Gly	Ser	His	Val	Ser		
			820						825						830		
gga	caa	agc	aat	ggg	cga	gat	cca	caa	gct	ctt	gcc	aag	gct	gta	cag		2544
Gly	Gln	Ser	Asn	Gly	Arg	Asp	Pro	Gln	Ala	Leu	Ala	Lys	Ala	Val	Gln		
			835						840						845		
att	cac	caa	gat	acc	tta	cgc	aca	atg	tac	ttc	gct	taa	atag	tcca	ag		2593
Ile	His	Gln	Asp	Thr	Leu	Arg	Thr	Met	Tyr	Phe	Ala	*					
			850						855						860		
tatattctct	gagaggaagt	actgaaagat	gaattgacat	acaacgtatg	tttccagtga												2653
agtcaattga	gtaaggacac	ctccagccat	acagaaacca	acactgtgtg	ggggccaagg												2713
tctgatcctt	atgttaatac	aaggaagatt	gtttacttca	tcaaggaaca	cagcatcatt												2773
atgcaatatg	aaaccagcca	actgcttttt	gtgcggtctc	ctataggaag	tatcgcaatt												2833
gttttggttt	catttcttgt	agtctaacc	ttttaatgcc	tttacctcaa	gttgcttggc												2893
agcacaaacta	tctttgcaaa	a															2914

<210> 3939
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 <212> DNA
 <213> Homo sapiens
 <220>

<221> CDS

<222> (88) .. (5412)

<400> 3939

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tacattcaag aaattttgag aaactac      atg tat gaa gat ttt cat gag ctt      111
                                   Met Tyr Glu Asp Phe His Glu Leu
                                   1                               5

ttt cag cgt ttg gat ttt gat aat gat ggc atg gtg gaa gca gat gac      159
Phe Gln Arg Leu Asp Phe Asp Asn Asp Gly Met Val Glu Ala Asp Asp
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tta cgc agc tta atg ttt tgt gat ttc cat gat ccc aag agg gag gat      207
Leu Arg Ser Leu Met Phe Cys Asp Phe His Asp Pro Lys Arg Glu Asp
    25                               30                               35                               40

acc aac tac aga gaa atc gca gat gtg gat aat ctt cga atg ata gta      255
Thr Asn Tyr Arg Glu Ile Ala Asp Val Asp Asn Leu Arg Met Ile Val
                                45                               50                               55

gaa att cac cta gaa gaa tac aac aat ata agc aaa aaa ccc atg aac      303
Glu Ile His Leu Glu Glu Tyr Asn Asn Ile Ser Lys Lys Pro Met Asn
                                60                               65                               70

ctt gtc ttg ttt cga ttt gcc ata gag cac atc agc aga att tcc agg      351
Leu Val Leu Phe Arg Phe Ala Ile Glu His Ile Ser Arg Ile Ser Arg
    75                               80                               85

atc ctg aag cag cct cgc agc cat gct ctc cta gta ggg gtt gga ggg      399
Ile Leu Lys Gln Pro Arg Ser His Ala Leu Leu Val Gly Val Gly Gly
    90                               95                               100

agt gga agg cag tct gtc acc aga tta gct gcc cac atg gct gat tat      447
Ser Gly Arg Gln Ser Val Thr Arg Leu Ala Ala His Met Ala Asp Tyr
   105                               110                               115                               120

tca gtt ttc caa gtt gaa atc tct aag ggg tat gat act act gaa tgg      495
Ser Val Phe Gln Val Glu Ile Ser Lys Gly Tyr Asp Thr Thr Glu Trp
   125                               130                               135

cat gaa gat tta aaa gtg atc tta agg aaa tgt gcg gaa gat act caa      543
His Glu Asp Leu Lys Val Ile Leu Arg Lys Cys Ala Glu Asp Thr Gln
   140                               145                               150

att aaa gaa gag tct ttt ctg gaa gat gtc agt aat ctg cta aat gct      591
Ile Lys Glu Glu Ser Phe Leu Glu Asp Val Ser Asn Leu Leu Asn Ala
   155                               160                               165

ggg gag att cca aat ctc ttt gca tta gat gag aag caa gag ata tgt      639
Gly Glu Ile Pro Asn Leu Phe Ala Leu Asp Glu Lys Gln Glu Ile Cys
   170                               175                               180

gat aag atg cgt cag tta gat cgc cag cgg gat aaa acc aag caa aca      687
Asp Lys Met Arg Gln Leu Asp Arg Gln Arg Asp Lys Thr Lys Gln Thr
   185                               190                               195                               200

gat ggc agc ccc ata gcc ctt ttc aac atg ttt att gat cat tgc cgc      735
Asp Gly Ser Pro Ile Ala Leu Phe Asn Met Phe Ile Asp His Cys Arg
   205                               210                               215

agc caa ctg cat gtg gtc ctt gcc atg agt ccc att gga gat gca ttt      783
Ser Gln Leu His Val Val Leu Ala Met Ser Pro Ile Gly Asp Ala Phe

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gac tgg ttt cag tca tgg cct gaa gat gca ctc cag gca gtt gcc tca Asp Trp Phe Gln Ser Trp Pro Glu Asp Ala Leu Gln Ala Val Ala Ser 250 255 260			879
cga ttc ttg gaa gaa att gaa atg tca gag gaa ata cga gat ggc tgt Arg Phe Leu Glu Glu Ile Glu Met Ser Glu Glu Ile Arg Asp Gly Cys 265 270 275 280			927
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tct ttc ttt gtt gaa ctt caa aga tac aat tat gtg act cct acc tct Ser Phe Phe Val Glu Leu Gln Arg Tyr Asn Tyr Val Thr Pro Thr Ser 300 305 310			1023
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gca cta cat cct caa tta aaa gtt gct agc aaa gag gtt gat gaa atg Ala Leu His Pro Gln Leu Lys Val Ala Ser Lys Glu Val Asp Glu Met 365 370 375			1215
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aaa gcc atc aaa gat gag tgc gat gct gac ctg gca ggt gcc ttg cca Lys Ala Ile Lys Asp Glu Cys Asp Ala Asp Leu Ala Gly Ala Leu Pro 410 415 420			1359
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att aca gtg gta aaa tcc atg aag agt cct cct gct ggt gtc aag ctt Ile Thr Val Val Lys Ser Met Lys Ser Pro Pro Ala Gly Val Lys Leu 445 450 455			1455
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cct gac cca aca ggt tca ggg aaa aaa att gag gat ttc tgg ggc cca Pro Asp Pro Thr Gly Ser Gly Lys Lys Ile Glu Asp Phe Trp Gly Pro 480 485 490			1551

475	480	485	
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745	750	755	760
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Tyr Val Ile Lys Leu Ser Glu Pro Asp Tyr Val Arg Thr Leu Glu Asn			
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Cys Ile Gln Phe Gly Thr Pro Val Leu Leu Glu Asn Val Gly Glu Glu			
	780	785	790
cta gat cct att ttg gaa cct ctt cta cta aaa caa acc ttt aag cag			2511
Leu Asp Pro Ile Leu Glu Pro Leu Leu Leu Lys Gln Thr Phe Lys Gln			
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Gly Gly Ser Thr Cys Ile Arg Leu Gly Asp Ser Thr Ile Glu Tyr Ala			
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cct gac ttc cgc ttc tat att act acc aag tta aga aat cct cat tat			2607
Pro Asp Phe Arg Phe Tyr Ile Thr Thr Lys Leu Arg Asn Pro His Tyr			
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ctt cct gaa aca tca gta aag gta aca tta tta aac ttc atg ata acc			2655
Leu Pro Glu Thr Ser Val Lys Val Thr Leu Leu Asn Phe Met Ile Thr			
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Pro Glu Gly Met Gln Asp Gln Leu Leu Gly Ile Val Val Ala Gln Glu			
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Arg Pro Asp Leu Glu Glu Glu Lys Gln Ala Leu Ile Leu Gln Gly Ala			
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Leu Ser Ser Ser Glu Gly Asn Ile Leu Glu Asp Glu Thr Ala Ile Lys			
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Ile Leu Ser Ser Ser Lys Ala Leu Ala Asn Glu Ile Ser Gln Lys Gln			
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Tyr Arg Pro Ile Ala Ile His Ser Ser Ile Leu Phe Phe Ser Leu Ala			
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Asp Leu Ala Asn Ile Glu Pro Met Tyr Gln Tyr Ser Leu Thr Trp Phe			
	970	975	980
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Ile Asn Leu Phe Ile Leu Ser Ile Glu Asn Ser Glu Lys Ser Glu Ile			

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1245	1250	1255	
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atg acc aat gaa gca cca aaa ggt tta cgg gct aat atc att cga tca Met Thr Asn Glu Ala Pro Lys Gly Leu Arg Ala Asn Ile Ile Arg Ser 1290 1295 1300			3999
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His Asn Gln Ser Arg Lys Trp His Arg Asn Gly Ile Lys Lys Pro Arg			
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Ser Gln Arg Tyr Glu Ser Leu Lys Gly Val Asp Pro Lys Phe Leu Arg			
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Asn Met Arg Phe Ala Lys Lys His Asn Lys Lys Gly Leu Lys Lys Met			
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Gln Ala Asn Asn Ala Lys Ala Met Ser Ala Arg Ala Glu Ala Ile Lys			
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Ala Leu Val Lys Pro Lys Glu Val Lys Pro Lys Ile Pro Lys Gly Val			
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Ser Arg Lys Leu Asp Arg Leu Ala Tyr Ile Ala His Pro Lys Leu Gly			
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Lys Arg Ala Arg Ala Arg Ile Ala Lys Gly Leu Arg Leu Cys Arg Pro			
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Lys Ala Lys Ala Lys Ala Lys Ala Lys Ala Lys Ala Lys Ala Gln Ala			
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      140              145              150

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Met Ala Leu Pro Ala Leu Gly Leu Asp Pro Trp Ser Leu Leu Gly Leu
      1              5              10              15

ttc ctc ttc caa ctg ctt cag ctg ctg ctg ccg acg acg acc gcg ggg      96
Phe Leu Phe Gln Leu Leu Gln Leu Leu Pro Thr Thr Thr Ala Gly
      20              25              30

gga ggc ggg cag ggg ccc atg ccc agg gtc aga tac tat gca ggg gat      144
Gly Gly Gly Gln Gly Pro Met Pro Arg Val Arg Tyr Tyr Ala Gly Asp
      35              40              45

gaa cgt agg gca ctt agc ttc ttc cac cag aag ggc ctc cag gat ttt      192
Glu Arg Arg Ala Leu Ser Phe Phe His Gln Lys Gly Leu Gln Asp Phe
      50              55              60

gac act ctg ctc ctg agt ggt gat gga aat act ctc tac gtg ggg gct      240
Asp Thr Leu Leu Leu Ser Gly Asp Gly Asn Thr Leu Tyr Val Gly Ala
      65              70              75              80

cga gaa gcc att ctg gcc ttg gat atc cag gat cca ggg gtc ccc agg      288
Arg Glu Ala Ile Leu Ala Leu Asp Ile Gln Asp Pro Gly Val Pro Arg
      85              90              95

cta aag aac atg ata ccg tgg cca gcc agt gac aga aaa aag agt gaa      336
Leu Lys Asn Met Ile Pro Trp Pro Ala Ser Asp Arg Lys Lys Ser Glu
      100              105              110

tgt gcc ttt aag aag aag agc aat gag aca cag tgt ttc aac ttc atc      384
Cys Ala Phe Lys Lys Lys Ser Asn Glu Thr Gln Cys Phe Asn Phe Ile
      115              120              125

cgt gtc ctg gtt tct tac aat gtc acc cat ctc tac acc tgc ggc acc      432
Arg Val Leu Val Ser Tyr Asn Val Thr His Leu Tyr Thr Cys Gly Thr
      130              135              140

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ttc gcc ttc agc cct gct tgt acc ttc att gaa ctt caa gat tcc tac	480
Phe Ala Phe Ser Pro Ala Cys Thr Phe Ile Glu Leu Gln Asp Ser Tyr	
145 150 155 160	
ctg ttg ccc atc tcg gag gac aag gtc atg gag gga aaa ggc caa agc	528
Leu Leu Pro Ile Ser Glu Asp Lys Val Met Glu Gly Lys Gly Gln Ser	
165 170 175	
ccc ttt gac ccc gct cac aag cat acg gct gtc ttg gtg gat ggg atg	576
Pro Phe Asp Pro Ala His Lys His Thr Ala Val Leu Val Asp Gly Met	
180 185 190	
ctc tat tct ggt act atg aac aac ttc ctg ggc agt gag ccc atc ctg	624
Leu Tyr Ser Gly Thr Met Asn Asn Phe Leu Gly Ser Glu Pro Ile Leu	
195 200 205	
atg cgc aca ctg gga tcc cag cct gtc ctc aag acc gac aac ttc ctc	672
Met Arg Thr Leu Gly Ser Gln Pro Val Leu Lys Thr Asp Asn Phe Leu	
210 215 220	
cgc tgg ctg cat cat gac gcc tcc ttt gtg gca gcc atc cct tcg acc	720
Arg Trp Leu His His Asp Ala Ser Phe Val Ala Ala Ile Pro Ser Thr	
225 230 235 240	
cag gtc gtc tac ttc ttc ttc gag gag aca gcc agc gag ttt gac ttc	768
Gln Val Val Tyr Phe Phe Phe Glu Glu Thr Ala Ser Glu Phe Asp Phe	
245 250 255	
ttt gag agg ctc cac aca tcg cgg gtg gct aga gtc tgc aag aat gac	816
Phe Glu Arg Leu His Thr Ser Arg Val Ala Arg Val Cys Lys Asn Asp	
260 265 270	
gtg ggc ggc gaa aag ctg ctg cag aag aag tgg acc acc ttc ctg aag	864
Val Gly Gly Glu Lys Leu Leu Gln Lys Lys Trp Thr Thr Phe Leu Lys	
275 280 285	
gcc cag ctg ctc tgc acc cag ccg ggg cag ctg ccc ttc aac gtc atc	912
Ala Gln Leu Leu Cys Thr Gln Pro Gly Gln Leu Pro Phe Asn Val Ile	
290 295 300	
cgc cac gcg gtc ctg ctc ccc gcc gat tct ccc aca gct ccc cac atc	960
Arg His Ala Val Leu Leu Pro Ala Asp Ser Pro Thr Ala Pro His Ile	
305 310 315 320	
tac gca gtc ttc acc tcc cag tgg cag gtt ggc ggg acc agg agc tct	1008
Tyr Ala Val Phe Thr Ser Gln Trp Gln Val Gly Gly Thr Arg Ser Ser	
325 330 335	
gcg gtt tgt gcc ttc tct ctc ttg gac att gaa cgt gtc ttt aag ggg	1056
Ala Val Cys Ala Phe Ser Leu Leu Asp Ile Glu Arg Val Phe Lys Gly	
340 345 350	
aaa tac aaa gag ttg aac aaa gaa act tca cgc tgg act act tat agg	1104
Lys Tyr Lys Glu Leu Asn Lys Glu Thr Ser Arg Trp Thr Thr Tyr Arg	
355 360 365	
ggc cct gag acc aac ccc cgg cca ggc agt tgc tca gtg ggc ccc tcc	1152
Gly Pro Glu Thr Asn Pro Arg Pro Gly Ser Cys Ser Val Gly Pro Ser	
370 375 380	
tct gat aag gcc ctg acc ttc atg aag gac cat ttc ctg atg gat gag	1200
Ser Asp Lys Ala Leu Thr Phe Met Lys Asp His Phe Leu Met Asp Glu	
385 390 395 400	

caa gtg gtg ggg acg ccc ctg ctg gtg aaa tct ggc gtg gag tat aca	1248
Gln Val Val Gly Thr Pro Leu Leu Val Lys Ser Gly Val Glu Tyr Thr	
405 410 415	
cgg ctt gca gtg gag aca gcc cag ggc ctt gat ggg cac agc cat ctt	1296
Arg Leu Ala Val Glu Thr Ala Gln Gly Leu Asp Gly His Ser His Leu	
420 425 430	
gtc atg tac ctg gga acc acc aca ggg tgc ctc cac aag gct gtg gta	1344
Val Met Tyr Leu Gly Thr Thr Thr Gly Ser Leu His Lys Ala Val Val	
435 440 445	
agt ggg gac agc agt gct cat ctg gtg gaa gag att cag ctg ttc cct	1392
Ser Gly Asp Ser Ser Ala His Leu Val Glu Glu Ile Gln Leu Phe Pro	
450 455 460	
gac cct gaa cct gtt cgc aac ctg cag ctg gcc ccc acc cag ggt gca	1440
Asp Pro Glu Pro Val Arg Asn Leu Gln Leu Ala Pro Thr Gln Gly Ala	
465 470 475 480	
gtg ttt gta ggc ttc tca gga ggt gtc tgg agg gtg ccc cga gcc aac	1488
Val Phe Val Gly Phe Ser Gly Gly Val Trp Arg Val Pro Arg Ala Asn	
485 490 495	
tgt agt gtc tat gag agc tgt gtg gac tgt gtc ctt gcc cgg gac ccc	1536
Cys Ser Val Tyr Glu Ser Cys Val Asp Cys Val Leu Ala Arg Asp Pro	
500 505 510	
cac tgt gcc tgg gac cct gag tcc cga acc tgt tgc ctc ctg tct gcc	1584
His Cys Ala Trp Asp Pro Glu Ser Arg Thr Cys Cys Leu Leu Ser Ala	
515 520 525	
ccc aac ctg aac tcc tgg aag cag gac atg gag cgg ggg aac cca gag	1632
Pro Asn Leu Asn Ser Trp Lys Gln Asp Met Glu Arg Gly Asn Pro Glu	
530 535 540	
tgg gca tgt gcc agt ggc ccc atg agc agg agc ctt cgg cct cag agc	1680
Trp Ala Cys Ala Ser Gly Pro Met Ser Arg Ser Leu Arg Pro Gln Ser	
545 550 555 560	
cgc ccg caa atc att aaa gaa gtc ctg gct gtc cct aac tcc atc ctg	1728
Arg Pro Gln Ile Ile Lys Glu Val Leu Ala Val Pro Asn Ser Ile Leu	
565 570 575	
gag ctc ccc tgc ccc cac ctg tca gcc ttg gcc tct tat tat tgg agt	1776
Glu Leu Pro Cys Pro His Leu Ser Ala Leu Ala Ser Tyr Tyr Trp Ser	
580 585 590	
cat ggc cca gca gca gtc cca gaa gcc tct tcc act gtc tac aat ggc	1824
His Gly Pro Ala Ala Val Pro Glu Ala Ser Ser Thr Val Tyr Asn Gly	
595 600 605	
tcc ctc ttg ctg ata gtg cag gat gga gtt ggg ggt ctc tac cag tgc	1872
Ser Leu Leu Leu Ile Val Gln Asp Gly Val Gly Gly Leu Tyr Gln Cys	
610 615 620	
tgg gca act gag aat ggc ttt tca tac cct gtg atc tcc tac tgg gtg	1920
Trp Ala Thr Glu Asn Gly Phe Ser Tyr Pro Val Ile Ser Tyr Trp Val	
625 630 635 640	
gac agc cag gac cag acc ctg gcc ctg gat cct gaa ctg gca ggc atc	1968
Asp Ser Gln Asp Gln Thr Leu Ala Leu Asp Pro Glu Leu Ala Gly Ile	
645 650 655	

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ccc cgg gag cat gtg aag gtc ccg ttg acc agg gtc agt ggt ggg gcc      2016
Pro Arg Glu His Val Lys Val Pro Leu Thr Arg Val Ser Gly Gly Ala
          660                      665                      670

gcc ctg gct gcc cag cag tcc tac tgg ccc cac ttt gtc act gtc act      2064
Ala Leu Ala Ala Gln Gln Ser Tyr Trp Pro His Phe Val Thr Val Thr
          675                      680                      685

gtc ctc ttt gcc tta gtg ctt tca gga gcc ctc atc atc ctc gtg gcc      2112
Val Leu Phe Ala Leu Val Leu Ser Gly Ala Leu Ile Ile Leu Val Ala
          690                      695                      700

tcc cca ttg aga gca ctc cgg gct cgg ggc aag gtt cag ggc tgt gag      2160
Ser Pro Leu Arg Ala Leu Arg Ala Arg Gly Lys Val Gln Gly Cys Glu
          705                      710                      715                      720

acc ctg cgc cct ggg gag aag gcc ccg tta agc aga gag caa cac ctc      2208
Thr Leu Arg Pro Gly Glu Lys Ala Pro Leu Ser Arg Glu Gln His Leu
          725                      730                      735

cag tct ccc aag gaa tgc agg acc tct gcc agt gat gtg gac gct gac      2256
Gln Ser Pro Lys Glu Cys Arg Thr Ser Ala Ser Asp Val Asp Ala Asp
          740                      745                      750

aac aac tgc cta ggc act gag gta gct taa a ctctaggcac aggcgggggc      2307
Asn Asn Cys Leu Gly Thr Glu Val Ala *
          755                      760

tgcgggtgcag gcacctggcc atgctggctg ggcgggccaa gcacagccct gactaggatg      2367

acagcagcac aaaagaccac ctttctcccc tgagaggagc ttctgctact ctgcatcact      2427

gatgacactc agcagggtga tgcacagcag tctgcctccc ctatgggact cccttctacc      2487

aagcacatga gctctctaac aggggtggggg ctacccccag acctgctcct acactgatat      2547

tgaagaacct ggagaggatc cttcagttct ggccattcca gggaccctcc agaaacacag      2607

tgtttcaaga gaccctaataa aacctgcctg tcccaggacc ctatggtaat gaacaccaaa      2667

catctaaaca atcatatgct aacatgccac tcctggaaac tccactctga agctgccgct      2727

ttggacacca aactccctt ctcccagggt catgcaggga tctgctccct cctgcttccc      2787

ttaccagtcg tgcaccgctg actcccagga agtcttccct gaagtctgac cacctttctt      2847

cttgcttcag ttggggcaga ctctgatccc ttctgccctg gcagaatggc aggggtaatc      2907

tgagccttct tactccttt accctagctg accccttcac ctctccccct cccttttctt      2967

ttgttttggg attcagaaaa ctgcttgatc gagactgttt attttttatt aaaaatataa      3027

ggcttatgta tgaaa                                                    3042

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<210> 3942
 <211> 1557
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS

<222> (802) .. (1230)

<220>

<221> misc_feature

<222> (1) ... (1557)

<223> n = a, t, c or g

<400> 3942

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cccgtaggaa gcctgggtccc cacgctggag cagccgcagg tgcccgcgaa ggtgcgacaa	120
cctgaaggtc ccgaaagcag cccaagtccg gccggggccg tggagaaggc ggcgggcgca	180
ggcctggagc cctcgagcaa gaaaaagccg ccttcgcctc gcccggggtc ccgcgcgtg	240
ccgcgcgtca gcctgggcta cgggggtctgc cccgagccgc cgtcaccggg ccctgccttg	300
gtcaagctgc cccggaatgg cgaggcgccc ggggctgagc ctgcgcccag cgctggggcg	360
cccatggagc tgcaggtaga tgtgcgcgtg aagcccgtgg gcgcggccgg tggcagcagc	420
acgccatcgc ccaggccctc cacgcgcttc ctcaaggctg cggcgcccg gtcctcgcc	480
ttctcccgcc acgcggaccc ggcgaccag ctcdtctctc gcgcaccatc ccaggcgggc	540
acgtggggcc gccgctcgcc gctggctgca gcccgacgg agagcggtg cgacgcagag	600
ggccgggcca gcccgcggga aggaagcgcc ggctccccg gctccccac gtgctgccgc	660
tgcaaggagc tggggctgga gaaggaggat gcggcgtgt tgccccgcgc ggggttgac	720
ggcgacgaga agctgccccg ggccgtaacg cttacggggc taccatgta cgtgaagtcc	780
ctgtactggg ccctggcggt c atg gct gtg ctg ctg gca gtc tct ggg gtt	831
Met Ala Val Leu Leu Ala Val Ser Gly Val	
1 5 10	
gtc att gtg gtc ctg gcc tca aga gca gga gcc aga tgc cag cag tgc	879
Val Ile Val Val Leu Ala Ser Arg Ala Gly Ala Arg Cys Gln Gln Cys	
15 20 25	
ccc cca ggc tgg gtg ttg tcc gag gag cac tgt tac tac ttc tct gca	927
Pro Pro Gly Trp Val Leu Ser Glu Glu His Cys Tyr Tyr Phe Ser Ala	
30 35 40	
gaa gcg cag gcc tgg gaa gcc agc cag gct ttc tgc tca gcc tac cac	975
Glu Ala Gln Ala Trp Glu Ala Ser Gln Ala Phe Cys Ser Ala Tyr His	
45 50 55	
gct acc ctg ccc ctg cta agc cac acc cag gac ttc ctg ggc aga tac	1023
Ala Thr Leu Pro Leu Leu Ser His Thr Gln Asp Phe Leu Gly Arg Tyr	
60 65 70	
cca gtc tcc agg cac tcc tgg gtg ggg gcc tgg cga ggc ccc cag ggc	1071
Pro Val Ser Arg His Ser Trp Val Gly Ala Trp Arg Gly Pro Gln Gly	
75 80 85 90	
tgg cac tgg atc gac gag gcc cca ctg ccg ccc cag cta ctg cct gag	1119
Trp His Trp Ile Asp Glu Ala Pro Leu Pro Pro Gln Leu Leu Pro Glu	
95 100 105	
gac ggc gag gac aat ctg gat atc aac tgt ggg gcc ctg gag gaa ggc	1167
Asp Gly Glu Asp Asn Leu Asp Ile Asn Cys Gly Ala Leu Glu Glu Gly	

110	115	120	
acg ctg gtg gct gca aac tgc agc act cca aga ccc tgg gtc tgt gcc			1215
Thr Leu Val Ala Ala Asn Cys Ser Thr Pro Arg Pro Trp Val Cys Ala			
125	130	135	
aag ggg acc cag tga tctgggctct gcctgggtcct cagcctgcca ggcagatgca			1270
Lys Gly Thr Gln *			
140			
gcacccccta caggggagggc cagttgagag cttgggcagc ctcttcctgg acccagttat			1330
ccaggtcttc atgctctgct caagggggcc acatgagcga gcctaggagc tggacttcaa			1390
cccaggaaga tgcattccgag ggaaaggaga ttttctatgg cctcaggcct gagtgccaat			1450
attagtctcc agcttctgtg gatgatcggt ttgatgacat tgngatgggt gtttagcatt			1510
tctgtgcctt ggtttcatta naatgacaat ttccccctaa aagaaaa			1557

<210> 3943
 <211> 380
 <212> PRT
 <213> Homo sapiens

<400> 3943

Met Ala Val Ala	Leu Val Arg	Glu Arg Asp	Leu Ser Phe	Pro Gly Val
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Gly Asp Ala Val	Val Asn Pro	Thr Arg Trp	His Leu Pro	Ala Gln Pro
	20	25		30
Glu Met Leu Tyr	Glu Gly Gly	Glu Gly Arg	Met Glu Thr	Leu Lys Asp
	35	40		45
Lys Thr Leu Gln	Glu Leu Glu	Leu Gln Asn	Asp Ser Glu	Ala Ile
	50	55		60
Asp Gln Leu Ala	Leu Glu Ser	Pro Glu Val	Gln Asp Leu	Gln Leu Glu
	65	70		80
Arg Glu Met Ala	Leu Ala Thr	Asn Arg Ser	Leu Ala Glu	Arg Asn Leu
	85	90		95
Glu Phe Gln Gly	Pro Leu Glu	Ile Ser Arg	Ser Asn Leu	Ser Asp Arg
	100	105		110
Tyr Gln Glu Leu	Arg Lys Leu	Val Glu Arg	Cys Gln Glu	Gln Lys Ala
	115	120		125
Lys Leu Glu Lys	Phe Ser Ser	Ala Leu Gln	Pro Gly Thr	Leu Leu Asp
	130	135		140
Leu Leu Gln Val	Glu Gly Met	Lys Ile Glu	Glu Glu Ser	Glu Ala Met
	145	150		160
Ala Glu Lys Phe	Leu Glu Gly	Glu Val Pro	Leu Glu Thr	Phe Leu Glu
	165	170		175
Asn Phe Ser Ser	Met Arg Met	Leu Ser His	Leu Arg Arg	Val Arg Val
	180	185		190
Glu Lys Leu Gln	Glu Val Val	Arg Lys Pro	Arg Ala Ser	Gln Glu Leu
	195	200		205
Ala Gly Asp Ala	Pro Pro Pro	Arg Pro Pro	Pro Val Arg	Pro Val
	210	215		220
Pro Gln Gly Thr	Pro Pro Val	Val Glu Glu	Gln Pro Gln	Pro Pro Leu
	225	230		240
Ala Met Pro Pro	Tyr Pro Leu	Pro Tyr Ser	Pro Ser Pro	Ser Leu Pro
	245	250		255
Val Gly Pro Thr	Ala His Gly	Ala Leu Pro	Pro Ala Pro	Phe Pro Val
	260	265		270
Val Ser Gln Pro	Ser Phe Tyr	Ser Gly Pro	Leu Gly Pro	Thr Tyr Pro
	275	280		285

Ala Ala Gln Leu Gly Pro Arg Val Pro Pro Thr Leu Asn Leu Trp Pro
 290 295 300
 Ser His Arg Arg Asp Ser Arg Val Asn Trp Lys Trp Arg Trp Cys Ser
 305 310 315 320
 Leu Trp Thr Cys Val Gly Thr Gln Arg Pro Trp Arg Asp Lys Ala Leu
 325 330 335
 Gly Gly Val Thr Gly His Gly Thr Cys Trp Pro Ser Gly Gln Arg Ser
 340 345 350
 Ser Trp Lys Pro Leu Leu Ser Val Pro Gly Cys Ser Gly Ala Ser Gln
 355 360 365
 Ala Gly Val Gln His Leu Ser Pro Val Ser Val *
 370 375 379

<210> 3944
 <211> 861
 <212> PRT
 <213> Homo sapiens

<400> 3944
 Met Glu Ile Gly Ser Ala Gly Pro Ala Gly Ala Gln Pro Leu Leu Met
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 Val Pro Arg Arg Pro Gly Tyr Gly Ala Met Gly Lys Pro Ile Lys Leu
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 Leu Ala Asn Cys Phe Gln Val Glu Ile Pro Lys Ile Asp Val Tyr Leu
 35 40 45
 Tyr Glu Val Asp Ile Lys Pro Asp Lys Cys Pro Arg Arg Val Asn Arg
 50 55 60
 Glu Val Val Asp Ser Met Val Gln His Phe Lys Val Thr Ile Phe Gly
 65 70 75 80
 Asp Arg Arg Pro Val Tyr Asp Gly Lys Arg Ser Leu Tyr Thr Ala Asn
 85 90 95
 Pro Leu Pro Val Ala Thr Thr Gly Val Asp Leu Asp Val Thr Leu Pro
 100 105 110
 Gly Glu Gly Gly Lys Asp Arg Pro Phe Lys Val Ser Ile Lys Phe Val
 115 120 125
 Ser Arg Val Ser Trp His Leu Leu His Glu Val Leu Thr Gly Arg Thr
 130 135 140
 Leu Pro Glu Pro Leu Glu Leu Asp Lys Pro Ile Ser Thr Asn Pro Val
 145 150 155 160
 His Ala Val Asp Val Val Leu Arg His Leu Pro Ser Met Lys Tyr Thr
 165 170 175
 Pro Val Gly Arg Ser Phe Phe Ser Ala Pro Glu Gly Tyr Asp His Pro
 180 185 190
 Leu Gly Gly Gly Arg Glu Val Trp Phe Gly Phe His Gln Ser Val Arg
 195 200 205
 Pro Ala Met Trp Lys Met Met Leu Asn Ile Asp Val Ser Ala Thr Ala
 210 215 220
 Phe Tyr Lys Ala Gln Pro Val Ile Gln Phe Met Cys Glu Val Leu Asp
 225 230 235 240
 Ile His Asn Ile Asp Glu Gln Pro Arg Pro Leu Thr Asp Ser His Arg
 245 250 255
 Val Lys Phe Thr Lys Glu Ile Lys Gly Leu Lys Val Glu Val Thr His
 260 265 270
 Cys Gly Thr Met Arg Arg Lys Tyr Arg Val Cys Asn Val Thr Arg Arg
 275 280 285
 Pro Ala Ser His Gln Thr Phe Pro Leu Gln Leu Glu Asn Gly Gln Thr
 290 295 300
 Val Glu Arg Thr Val Ala Gln Tyr Phe Arg Glu Lys Tyr Thr Leu Gln
 305 310 315 320
 Leu Lys Tyr Pro His Leu Pro Cys Leu Gln Val Gly Gln Glu Gln Lys
 325 330 335

His Thr Tyr Leu Pro Leu Glu Val Cys Asn Ile Val Ala Gly Gln Arg
 340 345 350
 Cys Ile Lys Lys Leu Thr Asp Asn Gln Thr Ser Thr Met Ile Lys Ala
 355 360 365
 Thr Ala Arg Ser Ala Pro Asp Arg Gln Glu Glu Ile Ser Arg Leu Val
 370 375 380
 Arg Ser Ala Asn Tyr Glu Thr Asp Pro Phe Val Gln Glu Phe Gln Phe
 385 390 395 400
 Lys Val Arg Asp Glu Met Ala His Val Thr Gly Arg Val Leu Pro Ala
 405 410 415
 Pro Met Leu Gln Tyr Gly Gly Arg Asn Arg Thr Val Ala Thr Pro Ser
 420 425 430
 His Gly Val Trp Asp Met Arg Gly Lys Gln Phe His Thr Gly Val Glu
 435 440 445
 Ile Lys Met Trp Ala Ile Ala Cys Phe Ala Thr Gln Arg Gln Cys Arg
 450 455 460
 Glu Glu Ile Leu Lys Gly Phe Thr Asp Gln Leu Arg Lys Ile Ser Lys
 465 470 475 480
 Asp Ala Gly Met Pro Ile Gln Gly Gln Pro Cys Phe Cys Lys Tyr Ala
 485 490 495
 Gln Gly Ala Asp Ser Val Glu Pro Met Phe Arg His Leu Lys Asn Thr
 500 505 510
 Tyr Ser Gly Leu Gln Leu Ile Ile Val Ile Leu Pro Gly Lys Thr Pro
 515 520 525
 Val Tyr Ala Glu Val Lys Arg Val Gly Asp Thr Leu Leu Gly Met Ala
 530 535 540
 Thr Gln Cys Val Gln Val Lys Asn Val Ile Lys Thr Ser Pro Gln Thr
 545 550 555 560
 Leu Ser Asn Leu Cys Leu Lys Ile Asn Val Lys Leu Gly Gly Ile Asn
 565 570 575
 Asn Ile Leu Val Pro His Gln Arg Pro Ser Val Phe Gln Gln Pro Val
 580 585 590
 Ile Phe Leu Gly Ala Asp Val Thr His Pro Pro Ala Gly Asp Gly Lys
 595 600 605
 Lys Pro Ser Ile Ala Ala Val Val Gly Ser Met Asp Ala His Pro Ser
 610 615 620
 Arg Tyr Cys Ala Thr Val Arg Val Gln Arg Pro Arg Gln Glu Ile Ile
 625 630 635 640
 Gln Asp Leu Ala Ser Met Val Arg Glu Leu Leu Ile Gln Phe Tyr Lys
 645 650 655
 Ser Thr Arg Phe Lys Pro Thr Arg Ile Ile Phe Tyr Arg Asp Gly Val
 660 665 670
 Ser Glu Gly Gln Phe Arg Gln Val Leu Tyr Tyr Glu Leu Leu Ala Ile
 675 680 685
 Arg Glu Ala Cys Ile Ser Leu Glu Lys Asp Tyr Gln Pro Gly Ile Thr
 690 695 700
 Tyr Ile Val Val Gln Lys Arg His His Thr Arg Leu Phe Cys Ala Asp
 705 710 715 720
 Arg Thr Glu Arg Val Gly Arg Ser Gly Asn Ile Pro Ala Gly Thr Thr
 725 730 735
 Val Asp Thr Asp Ile Thr His Pro Tyr Glu Phe Asp Phe Tyr Leu Cys
 740 745 750
 Ser His Ala Gly Ile Gln Gly Thr Ser Arg Pro Ser His Tyr His Val
 755 760 765
 Leu Trp Asp Asp Asn Cys Phe Thr Ala Asp Glu Leu Gln Leu Leu Thr
 770 775 780
 Tyr Gln Leu Cys His Thr Tyr Val Arg Cys Thr Arg Ser Val Ser Ile
 785 790 795 800
 Pro Ala Pro Ala Tyr Tyr Ala His Leu Val Ala Phe Arg Ala Arg Tyr
 805 810 815
 His Leu Val Asp Lys Glu His Asp Ser Ala Glu Gly Ser His Val Ser
 820 825 830
 Gly Gln Ser Asn Gly Arg Asp Pro Gln Ala Leu Ala Lys Ala Val Gln
 835 840 845

Ile His Gln Asp Thr Leu Arg Thr Met Tyr Phe Ala *
 850 855 860

<210> 3945
 <211> 1775
 <212> PRT
 <213> Homo sapiens

<400> 3945
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 1 5 10 15
 Asp Gly Met Val Glu Ala Asp Asp Leu Arg Ser Leu Met Phe Cys Asp
 20 25 30
 Phe His Asp Pro Lys Arg Glu Asp Thr Asn Tyr Arg Glu Ile Ala Asp
 35 40 45
 Val Asp Asn Leu Arg Met Ile Val Glu Ile His Leu Glu Glu Tyr Asn
 50 55 60
 Asn Ile Ser Lys Lys Pro Met Asn Leu Val Leu Phe Arg Phe Ala Ile
 65 70 75 80
 Glu His Ile Ser Arg Ile Ser Arg Ile Leu Lys Gln Pro Arg Ser His
 85 90 95
 Ala Leu Leu Val Gly Val Gly Gly Ser Gly Arg Gln Ser Val Thr Arg
 100 105 110
 Leu Ala Ala His Met Ala Asp Tyr Ser Val Phe Gln Val Glu Ile Ser
 115 120 125
 Lys Gly Tyr Asp Thr Thr Glu Trp His Glu Asp Leu Lys Val Ile Leu
 130 135 140
 Arg Lys Cys Ala Glu Asp Thr Gln Ile Lys Glu Glu Ser Phe Leu Glu
 145 150 155 160
 Asp Val Ser Asn Leu Leu Asn Ala Gly Glu Ile Pro Asn Leu Phe Ala
 165 170 175
 Leu Asp Glu Lys Gln Glu Ile Cys Asp Lys Met Arg Gln Leu Asp Arg
 180 185 190
 Gln Arg Asp Lys Thr Lys Gln Thr Asp Gly Ser Pro Ile Ala Leu Phe
 195 200 205
 Asn Met Phe Ile Asp His Cys Arg Ser Gln Leu His Val Val Leu Ala
 210 215 220
 Met Ser Pro Ile Gly Asp Ala Phe Arg Asn Arg Leu Arg Lys Phe Pro
 225 230 235 240
 Ala Leu Val Asn Cys Cys Thr Ile Asp Trp Phe Gln Ser Trp Pro Glu
 245 250 255
 Asp Ala Leu Gln Ala Val Ala Ser Arg Phe Leu Glu Glu Ile Glu Met
 260 265 270
 Ser Glu Glu Ile Arg Asp Gly Cys Ile Asp Met Cys Lys Ser Phe His
 275 280 285
 Thr Ser Thr Ile Asp Leu Ser Lys Ser Phe Phe Val Glu Leu Gln Arg
 290 295 300
 Tyr Asn Tyr Val Thr Pro Thr Ser Tyr Leu Glu Leu Ile Ser Thr Phe
 305 310 315 320
 Lys Leu Leu Leu Glu Lys Lys Arg Ser Glu Val Met Lys Met Lys Lys
 325 330 335
 Arg Tyr Glu Val Gly Leu Glu Lys Leu Asp Ser Ala Ser Ser Gln Val
 340 345 350
 Ala Thr Met Gln Met Glu Leu Glu Ala Leu His Pro Gln Leu Lys Val
 355 360 365
 Ala Ser Lys Glu Val Asp Glu Met Met Ile Met Ile Glu Lys Glu Ser
 370 375 380
 Val Glu Val Ala Lys Thr Glu Lys Ile Val Lys Ala Asp Glu Thr Ile
 385 390 395 400
 Ala Asn Glu Gln Ala Met Ala Ser Lys Ala Ile Lys Asp Glu Cys Asp
 405 410 415

Ala Asp Leu Ala Gly Ala Leu Pro Ile Leu Glu Ser Ala Leu Ala Ala
 420 425 430
 Leu Asp Thr Leu Thr Ala Gln Asp Ile Thr Val Val Lys Ser Met Lys
 435 440 445
 Ser Pro Pro Ala Gly Val Lys Leu Val Met Glu Ala Ile Cys Ile Leu
 450 455 460
 Lys Gly Ile Lys Ala Asp Lys Ile Pro Asp Pro Thr Gly Ser Gly Lys
 465 470 475 480
 Lys Ile Glu Asp Phe Trp Gly Pro Ala Lys Arg Leu Leu Gly Asp Met
 485 490 495
 Arg Phe Leu Gln Ser Leu His Glu Tyr Asp Lys Asp Asn Ile Pro Pro
 500 505 510
 Ala Tyr Met Asn Ile Ile Arg Lys Asn Tyr Ile Pro Asn Pro Asp Phe
 515 520 525
 Val Pro Glu Lys Ile Arg Asn Ala Ser Thr Ala Ala Glu Gly Leu Cys
 530 535 540
 Lys Trp Val Ile Ala Met Asp Ser Tyr Asp Lys Val Ala Lys Ile Val
 545 550 555 560
 Ala Pro Lys Lys Ile Lys Leu Ala Ala Ala Glu Gly Glu Leu Lys Ile
 565 570 575
 Ala Met Asp Gly Leu Arg Lys Lys Gln Ala Ala Leu Lys Glu Val Gln
 580 585 590
 Asp Lys Leu Ala Arg Leu Gln Asp Thr Leu Glu Leu Asn Lys Gln Lys
 595 600 605
 Lys Ala Asp Leu Glu Asn Gln Val Asp Leu Cys Ser Lys Lys Leu Glu
 610 615 620
 Arg Ala Glu Gln Leu Ile Gly Gly Leu Gly Gly Glu Lys Thr Arg Trp
 625 630 635 640
 Ser His Thr Ala Leu Glu Leu Gly Gln Leu Tyr Ile Asn Leu Thr Gly
 645 650 655
 Asp Ile Leu Ile Ser Ser Gly Val Val Ala Tyr Leu Gly Ala Phe Thr
 660 665 670
 Ser Thr Tyr Arg Gln Asn Gln Thr Lys Glu Trp Thr Thr Leu Cys Lys
 675 680 685
 Gly Arg Asp Ile Pro Cys Ser Asp Asp Cys Ser Leu Met Gly Thr Leu
 690 695 700
 Gly Glu Ala Val Thr Ile Arg Thr Trp Asn Ile Ala Gly Leu Pro Ser
 705 710 715 720
 Asp Ser Phe Ser Ile Asp Asn Gly Ile Ile Ile Met Asn Ala Arg Arg
 725 730 735
 Trp Pro Leu Met Ile Asp Pro Gln Ser Gln Ala Asn Lys Trp Ile Lys
 740 745 750
 Asn Met Glu Lys Ala Asn Ser Leu Tyr Val Ile Lys Leu Ser Glu Pro
 755 760 765
 Asp Tyr Val Arg Thr Leu Glu Asn Cys Ile Gln Phe Gly Thr Pro Val
 770 775 780
 Leu Leu Glu Asn Val Gly Glu Glu Leu Asp Pro Ile Leu Glu Pro Leu
 785 790 795 800
 Leu Leu Lys Gln Thr Phe Lys Gln Gly Gly Ser Thr Cys Ile Arg Leu
 805 810 815
 Gly Asp Ser Thr Ile Glu Tyr Ala Pro Asp Phe Arg Phe Tyr Ile Thr
 820 825 830
 Thr Lys Leu Arg Asn Pro His Tyr Leu Pro Glu Thr Ser Val Lys Val
 835 840 845
 Thr Leu Leu Asn Phe Met Ile Thr Pro Glu Gly Met Gln Asp Gln Leu
 850 855 860
 Leu Gly Ile Val Val Ala Gln Glu Arg Pro Asp Leu Glu Glu Glu Lys
 865 870 875 880
 Gln Ala Leu Ile Leu Gln Gly Ala Glu Asn Lys Arg Gln Leu Lys Glu
 885 890 895
 Ile Glu Asp Lys Ile Leu Glu Val Leu Ser Ser Ser Glu Gly Asn Ile
 900 905 910
 Leu Glu Asp Glu Thr Ala Ile Lys Ile Leu Ser Ser Ser Lys Ala Leu
 915 920 925

Ala Asn Glu Ile Ser Gln Lys Gln Glu Val Ala Glu Glu Thr Glu Lys
 930 935 940
 Lys Ile Asp Thr Thr Arg Met Gly Tyr Arg Pro Ile Ala Ile His Ser
 945 950 955 960
 Ser Ile Leu Phe Phe Ser Leu Ala Asp Leu Ala Asn Ile Glu Pro Met
 965 970 975
 Tyr Gln Tyr Ser Leu Thr Trp Phe Ile Asn Leu Phe Ile Leu Ser Ile
 980 985 990
 Glu Asn Ser Glu Lys Ser Glu Ile Leu Ala Lys Arg Leu Gln Ile Leu
 995 1000 1005
 Lys Asp His Phe Thr Tyr Ser Leu Tyr Val Asn Val Cys Arg Ser Leu
 1010 1015 1020
 Phe Glu Lys Asp Lys Leu Phe Ser Phe Cys Leu Thr Ile Asn Leu
 1025 1030 1035 1040
 Leu Leu His Glu Arg Ala Ile Asn Lys Ala Glu Trp Arg Phe Leu Leu
 1045 1050 1055
 Thr Gly Gly Ile Gly Leu Asp Asn Pro Tyr Ala Asn Pro Cys Thr Trp
 1060 1065 1070
 Leu Pro Gln Lys Ser Trp Asp Glu Ile Cys Arg Leu Asp Asp Leu Pro
 1075 1080 1085
 Ala Phe Lys Thr Ile Arg Arg Glu Phe Met Arg Leu Lys Asp Gly Trp
 1090 1095 1100
 Lys Lys Val Tyr Asp Ser Leu Glu Pro His His Glu Val Phe Pro Glu
 1105 1110 1115 1120
 Glu Trp Glu Asp Lys Ala Asn Glu Phe Gln Arg Met Leu Ile Ile Arg
 1125 1130 1135
 Cys Leu Arg Pro Asp Lys Val Ile Pro Met Leu Gln Glu Phe Ile Ile
 1140 1145 1150
 Asn Arg Leu Gly Arg Ala Phe Ile Glu Pro Pro Pro Phe Asp Leu Ala
 1155 1160 1165
 Lys Ala Phe Gly Asp Ser Asn Cys Cys Ala Pro Leu Ile Phe Val Leu
 1170 1175 1180
 Ser Pro Gly Ala Asp Pro Met Ala Ala Leu Leu Lys Phe Ala Asp Asp
 1185 1190 1195 1200
 Gln Gly Tyr Gly Gly Ser Lys Leu Ser Ser Leu Ser Leu Gly Gln Gly
 1205 1210 1215
 Gln Gly Pro Ile Ala Met Lys Met Leu Glu Lys Ala Val Lys Glu Gly
 1220 1225 1230
 Thr Trp Val Val Leu Gln Asn Cys His Leu Ala Thr Ser Trp Met Pro
 1235 1240 1245
 Thr Leu Glu Lys Val Cys Glu Glu Leu Ser Pro Glu Ser Thr His Pro
 1250 1255 1260
 Asp Phe Arg Met Trp Leu Thr Ser Tyr Pro Ser Pro Asn Phe Pro Val
 1265 1270 1275 1280
 Ser Val Leu Gln Asn Gly Val Lys Met Thr Asn Glu Ala Pro Lys Gly
 1285 1290 1295
 Leu Arg Ala Asn Ile Ile Arg Ser Tyr Leu Met Asp Pro Ile Ser Asp
 1300 1305 1310
 Pro Glu Phe Phe Gly Ser Cys Lys Lys Pro Glu Glu Phe Lys Lys Leu
 1315 1320 1325
 Leu Tyr Gly Leu Cys Phe Phe His Ala Leu Val Gln Glu Arg Arg Lys
 1330 1335 1340
 Phe Gly Pro Leu Gly Trp Asn Ile Pro Tyr Glu Phe Asn Glu Thr Asp
 1345 1350 1355 1360
 Leu Arg Ile Ser Val Gln Gln Leu His Met Phe Leu Asn Gln Tyr Glu
 1365 1370 1375
 Glu Leu Pro Tyr Glu Ala Leu Arg Tyr Met Thr Gly Glu Cys Asn Tyr
 1380 1385 1390
 Gly Gly Arg Val Thr Asp Asp Trp Asp Arg Arg Thr Leu Arg Ser Ile
 1395 1400 1405
 Leu Asn Lys Phe Phe Asn Pro Glu Leu Val Glu Asn Ser Asp Tyr Lys
 1410 1415 1420
 Phe Asp Ser Ser Gly Ile Tyr Phe Val Pro Pro Ser Gly Asp His Lys
 1425 1430 1435 1440

Ser Tyr Ile Glu Tyr Thr Lys Thr Leu Pro Leu Thr Pro Ala Pro Glu
 1445 1450 1455
 Ile Phe Gly Met Asn Ala Asn Ala Asp Ile Thr Lys Asp Gln Ser Glu
 1460 1465 1470
 Thr Gln Leu Leu Phe Asp Asn Ile Leu Leu Thr Gln Ser Arg Ser Ala
 1475 1480 1485
 Gly Ala Gly Ala Lys Ser Ser Asp Glu Val Val Asn Glu Val Ala Ser
 1490 1495 1500
 Asp Ile Leu Gly Lys Leu Pro Asn Asn Phe Asp Ile Glu Ala Ala Met
 1505 1510 1515 1520
 Arg Arg Tyr Pro Thr Thr Tyr Thr Gln Ser Met Asn Thr Val Leu Val
 1525 1530 1535
 Gln Glu Met Gly Arg Phe Asn Lys Leu Leu Lys Thr Ile Arg Asp Ser
 1540 1545 1550
 Cys Val Asn Ile Gln Lys Ala Ile Lys Gly Leu Ala Val Met Ser Thr
 1555 1560 1565
 Asp Leu Glu Glu Val Val Ser Ser Ile Leu Asn Val Lys Ile Pro Glu
 1570 1575 1580
 Met Trp Met Gly Lys Ser Tyr Pro Ser Leu Lys Pro Leu Gly Ser Tyr
 1585 1590 1595 1600
 Val Asn Asp Phe Leu Ala Arg Leu Lys Phe Leu Gln Gln Trp Tyr Glu
 1605 1610 1615
 Val Gly Pro Pro Pro Val Phe Trp Leu Ser Gly Phe Phe Phe Thr Gln
 1620 1625 1630
 Ala Phe Leu Thr Gly Ala Gln Gln Asn Tyr Ala Arg Lys Tyr Thr Ile
 1635 1640 1645
 Pro Ile Asp Leu Leu Gly Phe Asp Tyr Glu Val Met Glu Asp Lys Glu
 1650 1655 1660
 Tyr Lys His Pro Pro Glu Asp Gly Val Phe Ile His Gly Leu Phe Leu
 1665 1670 1675 1680
 Asp Gly Ala Ser Trp Asn Arg Lys Ile Lys Lys Leu Ala Glu Ser His
 1685 1690 1695
 Pro Lys Ile Leu Tyr Asp Thr Val Pro Val Met Trp Leu Lys Pro Cys
 1700 1705 1710
 Lys Arg Ala Asp Ile Pro Lys Arg Pro Ser Tyr Val Ala Pro Leu Tyr
 1715 1720 1725
 Lys Thr Ser Glu Arg Arg Gly Val Leu Ser Thr Thr Gly His Ser Thr
 1730 1735 1740
 Asn Phe Val Ile Ala Met Thr Leu Pro Ser Asp Gln Pro Lys Glu His
 1745 1750 1755 1760
 Trp Ile Gly Arg Gly Val Ala Leu Leu Cys Gln Leu Asn Ser *
 1765 1770 1774

<210> 3946

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3946

Met Ala Lys Ser Lys Asn His Thr Thr His Asn Gln Ser Arg Lys Trp
 1 5 10 15
 His Arg Asn Gly Ile Lys Lys Pro Arg Ser Gln Arg Tyr Glu Ser Leu
 20 25 30
 Lys Gly Val Asp Pro Lys Phe Leu Arg Asn Met Arg Phe Ala Lys Lys
 35 40 45
 His Asn Lys Lys Gly Leu Lys Lys Met Gln Ala Asn Asn Ala Lys Ala
 50 55 60
 Met Ser Ala Arg Ala Glu Ala Ile Lys Ala Leu Val Lys Pro Lys Glu
 65 70 75 80
 Val Lys Pro Lys Ile Pro Lys Gly Val Ser Arg Lys Leu Asp Arg Leu
 85 90 95

Ala Tyr Ile Ala His Pro Lys Leu Gly Lys Arg Ala Arg Ala Arg Ile
 100 105 110
 Ala Lys Gly Leu Arg Leu Cys Arg Pro Lys Ala Lys Ala Lys Ala Lys
 115 120 125
 Ala Lys Ala Lys Ala Lys Ala Gln Ala Lys Asp Gln Thr Lys Ala Gln
 130 135 140
 Ala Ala Ala Pro Ala Ser Val Pro Ala Gln Ala Pro Lys Arg Thr Gln
 145 150 155 160
 Ala Pro Thr Lys Ala Ser Glu *
 165 167

<210> 3947
 <211> 762
 <212> PRT
 <213> Homo sapiens

<400> 3947
 Met Ala Leu Pro Ala Leu Gly Leu Asp Pro Trp Ser Leu Leu Gly Leu
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 Phe Leu Phe Gln Leu Leu Gln Leu Leu Leu Pro Thr Thr Thr Ala Gly
 20 25 30
 Gly Gly Gly Gln Gly Pro Met Pro Arg Val Arg Tyr Tyr Ala Gly Asp
 35 40 45
 Glu Arg Arg Ala Leu Ser Phe Phe His Gln Lys Gly Leu Gln Asp Phe
 50 55 60
 Asp Thr Leu Leu Leu Ser Gly Asp Gly Asn Thr Leu Tyr Val Gly Ala
 65 70 75 80
 Arg Glu Ala Ile Leu Ala Leu Asp Ile Gln Asp Pro Gly Val Pro Arg
 85 90 95
 Leu Lys Asn Met Ile Pro Trp Pro Ala Ser Asp Arg Lys Lys Ser Glu
 100 105 110
 Cys Ala Phe Lys Lys Lys Ser Asn Glu Thr Gln Cys Phe Asn Phe Ile
 115 120 125
 Arg Val Leu Val Ser Tyr Asn Val Thr His Leu Tyr Thr Cys Gly Thr
 130 135 140
 Phe Ala Phe Ser Pro Ala Cys Thr Phe Ile Glu Leu Gln Asp Ser Tyr
 145 150 155 160
 Leu Leu Pro Ile Ser Glu Asp Lys Val Met Glu Gly Lys Gly Gln Ser
 165 170 175
 Pro Phe Asp Pro Ala His Lys His Thr Ala Val Leu Val Asp Gly Met
 180 185 190
 Leu Tyr Ser Gly Thr Met Asn Asn Phe Leu Gly Ser Glu Pro Ile Leu
 195 200 205
 Met Arg Thr Leu Gly Ser Gln Pro Val Leu Lys Thr Asp Asn Phe Leu
 210 215 220
 Arg Trp Leu His His Asp Ala Ser Phe Val Ala Ala Ile Pro Ser Thr
 225 230 235 240
 Gln Val Val Tyr Phe Phe Phe Glu Glu Thr Ala Ser Glu Phe Asp Phe
 245 250 255
 Phe Glu Arg Leu His Thr Ser Arg Val Ala Arg Val Cys Lys Asn Asp
 260 265 270
 Val Gly Gly Glu Lys Leu Leu Gln Lys Lys Trp Thr Thr Phe Leu Lys
 275 280 285
 Ala Gln Leu Leu Cys Thr Gln Pro Gly Gln Leu Pro Phe Asn Val Ile
 290 295 300
 Arg His Ala Val Leu Leu Pro Ala Asp Ser Pro Thr Ala Pro His Ile
 305 310 315 320
 Tyr Ala Val Phe Thr Ser Gln Trp Gln Val Gly Gly Thr Arg Ser Ser
 325 330 335
 Ala Val Cys Ala Phe Ser Leu Leu Asp Ile Glu Arg Val Phe Lys Gly
 340 345 350

Lys Tyr Lys Glu Leu Asn Lys Glu Thr Ser Arg Trp Thr Thr Tyr Arg
 355 360 365
 Gly Pro Glu Thr Asn Pro Arg Pro Gly Ser Cys Ser Val Gly Pro Ser
 370 375 380
 Ser Asp Lys Ala Leu Thr Phe Met Lys Asp His Phe Leu Met Asp Glu
 385 390 395 400
 Gln Val Val Gly Thr Pro Leu Leu Val Lys Ser Gly Val Glu Tyr Thr
 405 410 415
 Arg Leu Ala Val Glu Thr Ala Gln Gly Leu Asp Gly His Ser His Leu
 420 425 430
 Val Met Tyr Leu Gly Thr Thr Thr Gly Ser Leu His Lys Ala Val Val
 435 440 445
 Ser Gly Asp Ser Ser Ala His Leu Val Glu Glu Ile Gln Leu Phe Pro
 450 455 460
 Asp Pro Glu Pro Val Arg Asn Leu Gln Leu Ala Pro Thr Gln Gly Ala
 465 470 475 480
 Val Phe Val Gly Phe Ser Gly Gly Val Trp Arg Val Pro Arg Ala Asn
 485 490 495
 Cys Ser Val Tyr Glu Ser Cys Val Asp Cys Val Leu Ala Arg Asp Pro
 500 505 510
 His Cys Ala Trp Asp Pro Glu Ser Arg Thr Cys Cys Leu Leu Ser Ala
 515 520 525
 Pro Asn Leu Asn Ser Trp Lys Gln Asp Met Glu Arg Gly Asn Pro Glu
 530 535 540
 Trp Ala Cys Ala Ser Gly Pro Met Ser Arg Ser Leu Arg Pro Gln Ser
 545 550 555 560
 Arg Pro Gln Ile Ile Lys Glu Val Leu Ala Val Pro Asn Ser Ile Leu
 565 570 575
 Glu Leu Pro Cys Pro His Leu Ser Ala Leu Ala Ser Tyr Tyr Trp Ser
 580 585 590
 His Gly Pro Ala Ala Val Pro Glu Ala Ser Ser Thr Val Tyr Asn Gly
 595 600 605
 Ser Leu Leu Leu Ile Val Gln Asp Gly Val Gly Gly Leu Tyr Gln Cys
 610 615 620
 Trp Ala Thr Glu Asn Gly Phe Ser Tyr Pro Val Ile Ser Tyr Trp Val
 625 630 635 640
 Asp Ser Gln Asp Gln Thr Leu Ala Leu Asp Pro Glu Leu Ala Gly Ile
 645 650 655
 Pro Arg Glu His Val Lys Val Pro Leu Thr Arg Val Ser Gly Gly Ala
 660 665 670
 Ala Leu Ala Ala Gln Gln Ser Tyr Trp Pro His Phe Val Thr Val Thr
 675 680 685
 Val Leu Phe Ala Leu Val Leu Ser Gly Ala Leu Ile Ile Leu Val Ala
 690 695 700
 Ser Pro Leu Arg Ala Leu Arg Ala Arg Gly Lys Val Gln Gly Cys Glu
 705 710 715 720
 Thr Leu Arg Pro Gly Glu Lys Ala Pro Leu Ser Arg Glu Gln His Leu
 725 730 735
 Gln Ser Pro Lys Glu Cys Arg Thr Ser Ala Ser Asp Val Asp Ala Asp
 740 745 750
 Asn Asn Cys Leu Gly Thr Glu Val Ala *
 755 760 761

<210> 3948

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3948

Met Ala Val Leu Leu Ala Val Ser Gly Val Val Ile Val Val Leu Ala
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Ser Arg Ala Gly Ala Arg Cys Gln Gln Cys Pro Pro Gly Trp Val Leu
 20 25 30
 Ser Glu Glu His Cys Tyr Tyr Phe Ser Ala Glu Ala Gln Ala Trp Glu
 35 40 45
 Ala Ser Gln Ala Phe Cys Ser Ala Tyr His Ala Thr Leu Pro Leu Leu
 50 55 60
 Ser His Thr Gln Asp Phe Leu Gly Arg Tyr Pro Val Ser Arg His Ser
 65 70 75 80
 Trp Val Gly Ala Trp Arg Gly Pro Gln Gly Trp His Trp Ile Asp Glu
 85 90 95
 Ala Pro Leu Pro Pro Gln Leu Leu Pro Glu Asp Gly Glu Asp Asn Leu
 100 105 110
 Asp Ile Asn Cys Gly Ala Leu Glu Gly Thr Leu Val Ala Ala Asn
 115 120 125
 Cys Ser Thr Pro Arg Pro Trp Val Cys Ala Lys Gly Thr Gln *
 130 135 140 142

<210> 3949
 <211> 1465
 <212> DNA
 <213> Homo sapiens

<400> 3949
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 gacatatgcg gtggctgggg tcactctgag aagtgtcact ttggacttgt cccttgcggt 120
 gggatgatgga gtcagacacc accagcagtg gatggccaag cttcaagggc accttcttag 180
 cagctctgtg ggctgtgggc aaaagacttt cctgttctcc cttctccata ttagggaccc 240
 aggggaagtgc ttgctgcttc cagcctcgct gatggctctg aggagcaggt gatggctgtg 300
 gcattggtga gagaaaggga cctgtcattt ccaggggtgg gtgatgctgt ggtaaaccct 360
 acaaggtggc acttgccctgc ccagcctgag atgctgtatg agggcggtga gggaaggatg 420
 gagacgctga aggataagac cctgcaggag ctggaggagt tgcagaatga ctcggaggcg 480
 attgaccagc tggccctgga gtccctgag gtccaggacc tacagctgga acgggagatg 540
 gcaactggcca ccaaccggag cctggcagag cggaacttgg agttccaggg tccctggag 600
 atcagccgct caaacctctc ggatagatac caggagctcc ggaagctcgt ggagcggtgc 660
 caggagcaga aggcaaagct ggagaaattt tcttcagcac tgcagccagg gaccttgta 720
 gaccttctgc aggtggaagg catgaagatc gaagaagagt ccgaggccat ggctgagaag 780
 ttcttgaggg gcgaggtgcc cctggaacg ttcttgaga atttttctc catgaggatg 840
 ctgtcccacc tgcgcgggtg tgcgtggaa aagctccagg aagtgggtgag gaagcccagg 900
 gcttcccagg agctggccgg cgatgccctt ccaccccggt caccacccc ggtagcgcca 960
 gtccccagg gaacaccccc tgtggttgaa gagcagccgc agccaccatt agccatgcct 1020
 cctaccctt tgccctacag cccatcccc agcctgcctg tgggccccac tgcccatgga 1080
 gccctgccac cggcccttt cccagtagtg tccagccct ccttctacag cgggcctctg 1140
 ggccccactt acccggcagc ccagcttgga cccaggggtg ctgcgggtta ctccctggtc 1200
 ccacagagga gcatgccgcc cctccctatg ggttcccacc accgcccggg cctgcctggc 1260
 ctgggtatta gacacactcc tggccctcgg cccctcccta gtcccaccca cgctcaacct 1320
 ttggcccagc catcgccgag attcgagggt caactggaag tggcggttgg gctccctgtg 1380
 gacttgctgc ggcctacgtg ccatccgctg gacgctaggt cagcgctgcc ggtctttac 1440
 caaatgtgct tgcttctcct aagat 1465

<210> 3950
 <211> 819
 <212> DNA
 <213> Homo sapiens

<400> 3950
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 atagttgtgc tgccaagcaa cttgaggtaa aggcattaaa agggttagac tacaagaaat 120
 gaaaacaaaa caattgcatg acttctata ggagaccgca caaaaagcag ttggctgggt 180

tcatattgca	taatgatgct	gtgttccttg	atgaagtaaa	caatcttcct	tgtattaaca	240
taaggatcag	accttggccc	ccacacagtg	ttgggttctg	tatggctgga	ggtgtcctta	300
ctcaattgac	ttcactggaa	acatacgttg	tatgtcaatt	catctttcag	tacttcctct	360
cagagaatat	acttggacta	tttaagcgaa	gtacattgtg	cgtaaggat	cttgggtgaat	420
ctgtacagcc	ttggcaagag	cttgtggatc	tgcgccattg	ctttgtcctg	aaacgtgact	480
tccttcagca	ctgtcatgtt	ctttgtccac	aagatgatat	ctggctctaa	atgctaccag	540
gtgagcataa	tacgctgggtg	caggatagaa	aacagatcgt	gtacagcgta	cgtaagtgtg	600
gcagagctgg	taagtttagca	gctgaagttc	atctgcagta	aagcagttat	catgccctct	660
ccctgatagt	ggaagggcga	ctgctccgct	gtattccagc	atgggttcgag	aggtaagaat	720
ggccctccta	tgggtgtgta	acgtcagcct	catctgttgt	tccagctggg	atataaaaaa	780
aaattccaac	cctttctgtc	ctatcagcac	aaatcgaaa			819

<210> 3951

<211> 4620

<212> DNA

<213> Homo sapiens

<400> 3951

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tatgagtcac	attaagttaa	gctgcatttg	ctcataagta	aattcataat	tataacttta	120
gtcaaatgta	tttaaacaaa	caaaaaaaaa	aagggtttaag	tagtaaaata	atatgctttc	180
tttactcagc	cagccaacaa	gaaataaata	ggaacaagga	aatgatgtct	tctggttatg	240
aattaagttg	acataacagt	gctcaccttc	gtccaatcca	gtgttccttg	ggttggtcag	300
agggaagagt	cattggcaat	cacaaaattc	gtggaatggc	cagtgggtga	taatactctt	360
ctccgtcac	ttgtcttata	caatggagca	acataacttg	gccgttttgg	tatatctgcc	420
ctcttacagg	gcttttagcca	catcacaggc	actgtatcat	aaagaatttt	gggatgcgat	480
tctgcaagtt	tcttgatctt	tctattccag	gaagctccat	ccagaaataa	tccgtgaatg	540
aaaacacccat	cctcaggagg	atgcttgtat	tctttgtctt	ccatcacttc	atagtcaaac	600
ccaagaagat	caataggaat	tgtgtatttc	ctggcgtagt	tctgctgggc	accggtcagg	660
aaggcttgtg	tgaagaagaa	gccagaaagc	cagaagactg	gaggaggacc	aacctcatat	720
cattgctgca	agaatttttag	tcttgcaagg	aagtcattca	catagctgcc	aagtggttta	780
aggcttgggt	aggattttacc	catccacatt	tctgggaattt	tgacattcaa	aatgctgcta	840
accacttctt	caagatctgt	agacatgact	gcaagccctt	tgattgcttt	ttgaatattt	900
acgcacgaat	ctcttatggg	cttcagtaac	ttattgaacc	gtcccatctc	ttggacaagt	960
acagtgttca	tgctctgagt	ataagttggt	gggtacctcc	tcatggcagc	ctcgatgtcg	1020
aagttgtttg	gaagtttgcc	caagatgtca	ctagcgacct	cattcaactac	ttcatctgat	1080
gattttgcac	cagcacctgc	tgaacgagac	tgtgtaagaa	gaatgttatc	aaatagcagc	1140
tgagtttctg	actgatcctt	agtgatctct	gcattggcat	tcattccaaa	gatttctggg	1200
gctgggggtca	gtggcagagt	ctttgtgtat	tcatgttagc	ttttgtgata	cccagaagga	1260
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cctccgtaat	tgcattcgcc	agtcattgtac	cgcagagcct	catagcgagc	ttcctcatat	1440
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catgttctct	ccttgacagc	tttttctaac	atcttcatag	caatgggccc	ttggccttga	1920
ccaagagata	aagagctaag	ttttgatccc	ccatattcct	ggatcatcag	aaattttaga	1980
agggcagcca	tgggatctgc	tccaggagag	agcagcaaaa	tcagtgggtg	acagcagtta	2040
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aaggaaaaga	gcagcttata	cttttcaaa	agtgaccggc	agacattaac	atacagttaa	2520
taagtaaaagt	gatccttgag	aatctgaagc	ctttttgcca	aaatttctga	tttctctgaa	2580

ttttcaatag	acaggatgaa	aagggttaata	aaccagggtca	gtgaatactg	gtacatgggc	2640
tcaatggttg	ctaaatcagc	aagagaaaaa	aataggatgg	aagaatggat	ggcaatagga	2700
cgatagccca	tgcgggtggt	gtcaatcttt	ttctctgtct	cttcgggtac	ttcctgcttc	2760
tgagaaatct	cattagccaa	ggccttgagg	gaagataata	tcttaatagc	agtttcatct	2820
tctaataat	tgccttccga	agatgaaaga	acttctaaaa	tcttgctctc	tatttctttt	2880
aactgccttt	tattttcagc	tccttgtaat	atcaaggctt	gcttttcttc	ttcaaggctt	2940
ggcctttctt	gtgccaccac	aattcccaga	agctgatctt	gcattccctc	aggggttatc	3000
atgaagttaa	ataatgttac	ctttactgat	gtttcaggaa	gataatgagg	atttcttaac	3060
ttggtagtaa	tatagaagcg	gaagtcaggt	gcataattcaa	ttgtggagtc	cccaagccgg	3120
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<210> 3952

<211> 648

<212> DNA

<213> Homo sapiens

<400> 3952

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acaaagatac	aaatctctta	aggggggtgga	ccccaggttc	ctgggggaaca	tgtgctttac	180
caagaagcac	aagaagaagg	gcctaaagaa	gatgcaggcc	gacagtgcc	aggccgtgag	240
tacatgtgcc	aaggctatcg	aggccctcgt	aaagcccaaa	gagggttaagc	ccaagatccc	300
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aactcaggct	cccaaagggt	cccaggcccc	tacaaaggct	tcagggtaga	gatctctgtc	540
tgccaatatg	aggacagaag	gactgggggt	acccccctgg	ctgccgtctg	catggggctg	600
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<210> 3953

<211> 1901

<212> DNA

<213> Homo sapiens

<400> 3953

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gagtgaagaa ggctcagatt acccctgccca ttctgccagg gcagaagggg tcagagtcctg 180
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ggagtgtttg tgtccaaagc ggcagcttca gagtggagtt tccaggagtg gcatgttagc 360
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gtgcgaagta gtaataccaa taatcataca taaaccgca t 1901

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<210> 3954

<211> 823

<212> DNA

<213> Homo sapiens

<400> 3954

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tgccagcagt gccccccagg ctgggtgttg tccgaggagc actgttacta cttctctgca 180
gaagcgcagg cctgggaagc cagccaggct ttctgctcag cctaccacgc taccctcccc 240
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ctactccctg aggacggcga ggacaatctg gatataact gtggggccct ggaggaaggc 420
acgctgggtg ctgcaaactg cagcactcca agacctggg tctgtgccaa ggggaccag 480
tgatctgggc tctgcctggc cctcagcctg ccaggcagat gcagcaccac ctacagggga 540
ggccagttga gagcttgggc agcctcttcc tggaccagc tatccaggct tcatgctct 600
gctcaagggg gccacatgag cagcctagg agctggactt caaccaggga agatgcatcc 660
gagggaaagg agattttcta tggcctcagg cctgagtgcc aatattagtc tccagcttct 720
gtggatgac ggtttgatga cattgggatg gttgtttagc atttctgtgc cttggtttca 780
ttaaagtac aatttcccc tagaggaaaa agacagggtt aac 823

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<210> 3955

<211> 346

<212> PRT

<213> Homo sapiens

<221> misc_feature
 <222> (1)...(345)
 <223> Xaa = any amino acid or nothing

<400> 3955
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 20 25 30
 Pro Gly Val Gly Asp Ala Val Val Asn Pro Thr Arg Trp His Leu Pro
 35 40 45
 Ala Gln Pro Glu Met Leu Tyr Glu Gly Gly Glu Gly Arg Met Glu Thr
 50 55 60
 Leu Lys Asp Lys Thr Leu Gln Glu Leu Glu Glu Leu Gln Asn Asp Ser
 65 70 75 80
 Glu Ala Ile Asp Gln Leu Ala Leu Glu Ser Pro Glu Val Gln Asp Leu
 85 90 95
 Gln Leu Glu Arg Glu Met Ala Leu Ala Thr Asn Arg Ser Leu Ala Glu
 100 105 110
 Arg Asn Leu Glu Phe Gln Gly Pro Leu Glu Ile Ser Arg Ser Asn Leu
 115 120 125
 Ser Asp Arg Tyr Gln Glu Leu Arg Lys Leu Val Glu Arg Cys Gln Glu
 130 135 140
 Gln Lys Ala Lys Leu Glu Lys Phe Ser Ser Ala Leu Gln Pro Gly Thr
 145 150 155 160
 Leu Leu Asp Leu Leu Gln Val Glu Gly Met Lys Ile Glu Glu Glu Ser
 165 170 175
 Glu Ala Met Ala Glu Lys Phe Leu Glu Gly Glu Val Pro Leu Glu Thr
 180 185 190
 Phe Leu Glu Asn Phe Ser Ser Met Arg Met Leu Ser His Leu Arg Arg
 195 200 205
 Val Arg Val Glu Lys Leu Gln Glu Val Val Arg Lys Pro Arg Ala Ser
 210 215 220
 Gln Glu Leu Ala Gly Asp Ala Pro Pro Pro Arg Ser Pro Pro Pro Val
 225 230 235 240
 Pro Pro Ser Pro Pro Gly Asn Thr Pro Cys Gly Xaa Arg Ala Ala Ala
 245 250 255
 Ala Thr Ile Ser His Ala Ser Leu Pro Phe Ala Leu Gln Pro Ile Pro
 260 265 270
 Gln Pro Ala Cys Gly Pro His Cys Pro Trp Ser Pro Ala Thr Gly Pro
 275 280 285
 Phe Pro Ser Ser Val Pro Ala Leu Leu Leu Gln Arg Ala Ser Gly Pro
 290 295 300
 His Leu Pro Gly Ser Pro Ala Trp Thr Gln Gly Cys Cys Gly Leu Leu
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 Leu Val Pro Thr Glu His Ala Ala Pro Pro Tyr Gly Phe Pro Pro
 325 330 335
 Pro Pro Gly Pro Ala Trp Pro Gly Tyr
 340 345

<210> 3956
 <211> 147
 <212> PRT
 <213> Homo sapiens

<221> misc_feature
 <222> (1)...(145)
 <223> Xaa = any amino acid or nothing

<400> 3956

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 Pro Ala Gly Thr Thr Asp Glu Ala Asp Val Thr His Pro Xaa Glu Gly
 20 25 30
 His Ser Tyr Leu Ser Asn His Ala Gly Ile Gln Arg Ser Ser Arg Pro
 35 40 45
 Ser His Tyr Gln Gly Glu Trp His Asp Asn Cys Phe Thr Ala Asp Glu
 50 55 60
 Leu Gln Leu Leu Thr Tyr Gln Leu Cys His Thr Tyr Val Arg Cys Thr
 65 70 75 80
 Arg Ser Val Ser Ile Pro Ala Pro Ala Tyr Tyr Ala His Leu Val Ala
 85 90 95
 Phe Arg Ala Arg Tyr His Leu Val Asp Lys Glu His Asp Ser Ala Glu
 100 105 110
 Gly Ser His Val Ser Gly Gln Ser Asn Gly Arg Asp Pro Gln Ala Leu
 115 120 125
 Ala Lys Ala Val Gln Ile His Gln Asp Thr Leu Arg Thr Met Tyr Phe
 130 135 140
 Ala
 145

<210> 3957

<211> 1461

<212> PRT

<213> Homo sapiens

<400> 3957

Glu Leu Ile Ser Thr Phe Lys Leu Leu Leu Glu Lys Lys Arg Ser Glu
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 Val Met Lys Met Lys Lys Arg Tyr Glu Val Gly Leu Glu Lys Leu Asp
 20 25 30
 Ser Ala Ser Ser Gln Val Ala Thr Met Gln Met Glu Leu Glu Ala Leu
 35 40 45
 His Pro Gln Leu Lys Val Ala Ser Lys Glu Val Asp Glu Met Met Ile
 50 55 60
 Met Ile Glu Lys Glu Ser Val Glu Val Ala Lys Thr Glu Lys Ile Val
 65 70 75 80
 Lys Ala Asp Glu Thr Ile Ala Asn Glu Gln Ala Met Ala Ser Lys Ala
 85 90 95
 Ile Lys Asp Glu Cys Asp Ala Asp Leu Ala Gly Ala Leu Pro Ile Leu
 100 105 110
 Glu Ser Ala Leu Ala Ala Leu Asp Thr Leu Thr Ala Gln Asp Ile Thr
 115 120 125
 Val Val Lys Ser Met Lys Ser Pro Pro Ala Gly Val Lys Leu Val Met
 130 135 140
 Glu Ala Ile Cys Ile Leu Lys Gly Ile Lys Ala Asp Lys Ile Pro Asp
 145 150 155 160
 Pro Thr Gly Ser Gly Lys Lys Ile Glu Asp Phe Trp Gly Pro Ala Lys
 165 170 175
 Arg Leu Leu Gly Asp Met Arg Phe Leu Gln Ser Leu His Glu Tyr Asp
 180 185 190
 Lys Asp Asn Ile Pro Pro Ala Tyr Met Asn Ile Ile Arg Lys Asn Tyr
 195 200 205
 Ile Pro Asn Pro Asp Phe Val Pro Glu Lys Ile Arg Asn Ala Ser Thr
 210 215 220
 Ala Ala Glu Gly Leu Cys Lys Trp Val Ile Ala Met Asp Ser Tyr Asp
 225 230 235 240
 Lys Val Ala Lys Ile Val Ala Pro Lys Lys Ile Lys Leu Ala Ala Ala
 245 250 255
 Glu Gly Glu Leu Lys Ile Ala Met Asp Gly Leu Arg Lys Lys Gln Ala

260	265	270
Ala Leu Lys Glu Val Gln Asp Lys Leu Ala Arg Leu Gln Asp Thr Leu		
275	280	285
Glu Leu Asn Lys Gln Lys Lys Ala Asp Leu Glu Asn Gln Val Asp Leu		
290	295	300
Cys Ser Lys Lys Leu Glu Arg Ala Glu Gln Leu Ile Gly Gly Leu Gly		
305	310	315
Gly Glu Lys Thr Arg Trp Ser His Thr Ala Leu Glu Leu Gly Gln Leu		
325	330	335
Tyr Ile Asn Leu Thr Gly Asp Ile Leu Ile Ser Ser Gly Val Val Ala		
340	345	350
Tyr Leu Gly Ala Phe Thr Ser Thr Tyr Arg Gln Asn Gln Thr Lys Glu		
355	360	365
Trp Thr Thr Leu Cys Lys Gly Arg Asp Ile Pro Cys Ser Asp Asp Cys		
370	375	380
Ser Leu Met Gly Thr Leu Gly Glu Ala Val Thr Ile Arg Thr Trp Asn		
385	390	395
Ile Ala Gly Leu Pro Ser Asp Ser Phe Ser Ile Asp Asn Gly Ile Ile		
405	410	415
Ile Met Asn Ala Arg Arg Trp Pro Leu Met Ile Asp Pro Gln Ser Gln		
420	425	430
Ala Asn Lys Trp Ile Lys Asn Met Glu Lys Ala Asn Ser Leu Tyr Val		
435	440	445
Ile Lys Leu Ser Glu Pro Asp Tyr Val Arg Thr Leu Glu Asn Cys Ile		
450	455	460
Gln Phe Gly Thr Pro Val Leu Leu Glu Asn Val Gly Glu Glu Leu Asp		
465	470	475
Pro Ile Leu Glu Pro Leu Leu Leu Lys Gln Thr Phe Lys Gln Gly Gly		
485	490	495
Ser Thr Cys Ile Arg Leu Gly Asp Ser Thr Ile Glu Tyr Ala Pro Asp		
500	505	510
Phe Arg Phe Tyr Ile Thr Thr Lys Leu Arg Asn Pro His Tyr Leu Pro		
515	520	525
Glu Thr Ser Val Lys Val Thr Leu Leu Asn Phe Met Ile Thr Pro Glu		
530	535	540
Gly Met Gln Asp Gln Leu Leu Gly Ile Val Val Ala Gln Glu Arg Pro		
545	550	555
Asp Leu Glu Glu Glu Lys Gln Ala Leu Ile Leu Gln Gly Ala Glu Asn		
565	570	575
Lys Arg Gln Leu Lys Glu Ile Glu Asp Lys Ile Leu Glu Val Leu Ser		
580	585	590
Ser Ser Glu Gly Asn Ile Leu Glu Asp Glu Thr Ala Ile Lys Ile Leu		
595	600	605
Ser Ser Ser Lys Ala Leu Ala Asn Glu Ile Ser Gln Lys Gln Glu Val		
610	615	620
Ala Glu Glu Thr Glu Lys Lys Ile Asp Thr Thr Arg Met Gly Tyr Arg		
625	630	635
Pro Ile Ala Ile His Ser Ser Ile Leu Phe Phe Ser Leu Ala Asp Leu		
645	650	655
Ala Asn Ile Glu Pro Met Tyr Gln Tyr Ser Leu Thr Trp Phe Ile Asn		
660	665	670
Leu Phe Ile Leu Ser Ile Glu Asn Ser Glu Lys Ser Glu Ile Leu Ala		
675	680	685
Lys Arg Leu Gln Ile Leu Lys Asp His Phe Thr Tyr Ser Leu Tyr Val		
690	695	700
Asn Val Cys Arg Ser Leu Phe Glu Lys Asp Lys Leu Leu Phe Ser Phe		
705	710	715
Cys Leu Thr Ile Asn Leu Leu Leu His Glu Arg Ala Ile Asn Lys Ala		
725	730	735
Glu Trp Arg Phe Leu Leu Thr Gly Gly Ile Gly Leu Asp Asn Pro Tyr		
740	745	750
Ala Asn Pro Cys Thr Trp Leu Pro Gln Lys Ser Trp Asp Glu Ile Cys		
755	760	765
Arg Leu Asp Asp Leu Pro Ala Phe Lys Thr Ile Arg Arg Glu Phe Met		

770	775	780
Arg Leu Lys Asp Gly Trp Lys Lys Val Tyr Asp Ser Leu Glu Pro His		
785	790	795
His Glu Val Phe Pro Glu Glu Trp Glu Asp Lys Ala Asn Glu Phe Gln		800
	805	810
Arg Met Leu Ile Ile Arg Cys Leu Arg Pro Asp Lys Val Ile Pro Met		815
	820	825
Leu Gln Glu Phe Ile Ile Asn Arg Leu Gly Arg Ala Phe Ile Glu Pro		830
	835	840
Pro Pro Phe Asp Leu Ala Lys Ala Phe Gly Asp Ser Asn Cys Cys Ala		845
	850	855
Pro Leu Ile Phe Val Leu Ser Pro Gly Ala Asp Pro Met Ala Ala Leu		860
865	870	875
Leu Lys Phe Ala Asp Gln Gly Tyr Gly Gly Ser Lys Leu Ser Ser		880
	885	890
Leu Ser Leu Gly Gln Gly Gln Gly Pro Ile Ala Met Lys Met Leu Glu		895
	900	905
Lys Ala Val Lys Glu Gly Thr Trp Val Val Leu Gln Asn Cys His Leu		910
	915	920
Ala Thr Ser Trp Met Pro Thr Leu Glu Lys Val Cys Glu Glu Leu Ser		925
930	935	940
Pro Glu Ser Thr His Pro Asp Phe Arg Met Trp Leu Thr Ser Tyr Pro		945
	950	955
Ser Pro Asn Phe Pro Val Ser Val Leu Gln Asn Gly Val Lys Met Thr		960
	965	970
Asn Glu Ala Pro Lys Gly Leu Arg Ala Asn Ile Ile Arg Ser Tyr Leu		975
	980	985
Met Asp Pro Ile Ser Asp Pro Glu Phe Phe Gly Ser Cys Lys Lys Pro		990
	995	1000
Glu Glu Phe Lys Lys Leu Leu Tyr Gly Leu Cys Phe Phe His Ala Leu		1005
1010	1015	1020
Val Gln Glu Arg Arg Lys Phe Gly Pro Leu Trp Trp Asn Ile Pro Tyr		1025
1025	1030	1035
Glu Phe Asn Glu Thr Asp Leu Arg Ile Ser Val Gln Gln Leu His Met		1040
	1045	1050
Phe Leu Asn Gln Tyr Glu Glu Leu Pro Tyr Glu Ala Leu Arg Tyr Met		1055
	1060	1065
Thr Gly Glu Cys Asn Tyr Gly Gly Arg Val Thr Asp Asp Trp Asp Arg		1070
1075	1080	1085
Arg Thr Leu Arg Ser Ile Leu Asn Lys Phe Phe Asn Pro Glu Leu Val		1090
	1095	1100
Glu Asn Ser Asp Tyr Lys Phe Asp Ser Ser Gly Ile Tyr Phe Val Pro		1105
1105	1110	1115
Pro Ser Gly Asp His Lys Ser Tyr Ile Glu Tyr Thr Lys Thr Leu Pro		1120
	1125	1130
Leu Thr Pro Ala Pro Glu Ile Phe Gly Met Asn Ala Asn Ala Asp Ile		1135
	1140	1145
Thr Lys Asp Gln Ser Glu Thr Gln Leu Leu Phe Asp Asn Ile Leu Leu		1150
	1155	1160
Thr Gln Ser Arg Ser Ala Gly Ala Gly Ala Lys Ser Ser Asp Glu Val		1165
1170	1175	1180
Val Asn Glu Val Ala Ser Asp Ile Leu Gly Lys Leu Pro Asn Asn Phe		1185
1185	1190	1195
Asp Ile Glu Ala Ala Met Arg Arg Tyr Pro Thr Thr Tyr Thr Gln Ser		1200
	1205	1210
Met Asn Thr Val Leu Val Gln Glu Met Gly Arg Phe Asn Lys Leu Leu		1215
	1220	1225
Lys Thr Ile Arg Asp Ser Cys Val Asn Ile Gln Lys Ala Ile Lys Gly		1230
	1235	1240
Leu Ala Val Met Ser Thr Asp Leu Glu Glu Val Val Ser Ser Ile Leu		1245
	1250	1255
Asn Val Lys Ile Pro Glu Met Trp Met Gly Lys Ser Tyr Pro Ser Leu		1260
1265	1270	1275
Lys Pro Leu Gly Ser Tyr Val Asn Asp Phe Leu Ala Arg Leu Lys Phe		1280

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1285      1290      1295
Leu Gln Gln Trp Tyr Glu Val Gly Pro Pro Pro Val Phe Trp Leu Ser
1300      1305      1310
Gly Phe Phe Phe Thr Gln Ala Phe Leu Thr Gly Ala Gln Gln Asn Tyr
1315      1320      1325
Ala Arg Lys Tyr Thr Ile Pro Ile Asp Leu Leu Gly Phe Asp Tyr Glu
1330      1335      1340
Val Met Glu Asp Lys Glu Tyr Lys His Pro Pro Glu Asp Gly Val Phe
1345      1350      1355      1360
Ile His Gly Leu Phe Leu Asp Gly Ala Ser Trp Asn Arg Lys Ile Lys
1365      1370      1375
Lys Leu Ala Glu Ser His Pro Lys Ile Leu Tyr Asp Thr Val Pro Val
1380      1385      1390
Met Trp Leu Lys Pro Cys Lys Arg Ala Asp Ile Pro Lys Arg Pro Ser
1395      1400      1405
Tyr Val Ala Pro Leu Tyr Lys Thr Ser Glu Arg Arg Gly Val Leu Ser
1410      1415      1420
Thr Thr Gly His Ser Thr Asn Phe Val Ile Ala Met Thr Leu Pro Ser
1425      1430      1435      1440
Asp Gln Pro Lys Glu His Trp Ile Gly Arg Gly Val Ala Leu Leu Cys
1445      1450      1455
Gln Leu Asn Ser
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<210> 3958

<211> 164

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(164)

<223> Xaa = any amino acid or nothing

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<400> 3958
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20      25      30
Lys Ser Leu Lys Gly Val Asp Pro Lys Phe Leu Gly Asn Met Cys Phe
35      40      45
Thr Lys Lys His Lys Lys Lys Gly Leu Lys Lys Met Gln Ala Asp Ser
50      55      60
Ala Lys Ala Val Ser Thr Cys Ala Lys Ala Ile Glu Ala Leu Val Lys
65      70      75      80
Pro Lys Glu Val Lys Pro Lys Ile Pro Lys Gly Val Ser Cys Glu Leu
85      90      95
Asn Xaa Leu Ala Tyr Ile Ala Tyr Pro Lys Phe Trp Thr Cys Ala Cys
100      105      110
Ala Cys Ile Ala Lys Gly Leu Arg Leu Cys Gln Pro Lys Ala Lys Ala
115      120      125
Gln Asp Gln Thr Lys Ala Gln Val Gln Ile Lys Ala Gln Ala Ala Ala
130      135      140
Pro Ala Ser Val Pro Thr Gln Ala Pro Lys Gly Ala Gln Ala Pro Thr
145      150      155      160
Lys Ala Ser Gly
164

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<210> 3959

<211> 373

<212> PRT

<213> Homo sapiens

<400> 3959

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Leu Leu Val Leu Leu Leu Arg Thr Asn Leu Leu Ile Ala Ser Ser Thr
 1          5          10          15
Arg Ile Ser Arg Ala Thr Leu Thr Cys Ser Pro Pro Gly Ile Pro Val
          20          25          30
Asp Pro Arg Val Arg Pro Arg Val Arg Ser His Leu Val Met Tyr Leu
          35          40          45
Gly Ile Thr Thr Gly Ser Leu His Lys Ala Val Val Ser Gly Asp Ser
          50          55          60
Ser Ala His Leu Val Glu Ile Gln Leu Phe Pro Asp Pro Glu Pro
          65          70          75          80
Val Arg Asn Leu Gln Leu Ala Pro Thr Gln Gly Ala Val Phe Val Gly
          85          90          95
Phe Ser Gly Gly Val Trp Arg Val Pro Arg Ala Asn Cys Ser Val Tyr
          100          105          110
Glu Ser Cys Val Asp Cys Val Leu Ala Arg Asp Pro His Cys Ala Trp
          115          120          125
Asp Pro Glu Ser Arg Thr Cys Cys Leu Leu Ser Ala Pro Asn Leu Asn
          130          135          140
Ser Trp Lys Gln Asp Met Glu Arg Gly Asn Pro Glu Trp Ala Cys Ala
          145          150          155          160
Ser Gly Pro Met Ser Arg Ser Leu Arg Pro Gln Ser Arg Pro Gln Ile
          165          170          175
Ile Lys Glu Val Leu Ala Val Pro Asn Ser Ile Leu Glu Leu Pro Cys
          180          185          190
Pro His Leu Ser Ala Leu Ala Ser Tyr Tyr Trp Ser His Gly Pro Ala
          195          200          205
Ala Val Pro Glu Ala Ser Ser Thr Val Tyr Asn Gly Ser Leu Leu Leu
          210          215          220
Ile Val Gln Asp Gly Val Gly Gly Leu Tyr Gln Cys Trp Ala Thr Glu
          225          230          235          240
Asn Gly Phe Ser Tyr Pro Val Ile Ser Tyr Trp Val Asp Ser Gln Asp
          245          250          255
Gln Thr Leu Ala Leu Asp Pro Glu Leu Ala Gly Ile Pro Arg Glu His
          260          265          270
Val Lys Val Pro Leu Thr Arg Val Ser Gly Gly Ala Ala Leu Ala Ala
          275          280          285
Gln Gln Ser Tyr Trp Pro His Phe Val Thr Val Thr Val Leu Phe Ala
          290          295          300
Leu Val Leu Ser Gly Ala Leu Ile Ile Leu Val Ala Ser Pro Leu Arg
          305          310          315          320
Ala Leu Arg Ala Arg Gly Lys Val Gln Gly Cys Glu Thr Leu Arg Pro
          325          330          335
Gly Glu Lys Ala Pro Leu Ser Arg Glu Gln His Leu Gln Ser Pro Lys
          340          345          350
Glu Cys Arg Thr Ser Ala Ser Asp Val Asp Ala Asp Asn Asn Cys Leu
          355          360          365
Gly Thr Glu Val Ala
          370          373

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<210> 3960

<211> 160

<212> PRT

<213> Homo sapiens

<400> 3960

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Ser Tyr Ala Ala Pro Ser Leu Phe Val Lys Ser Leu Tyr Trp Ala Leu

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5737